

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

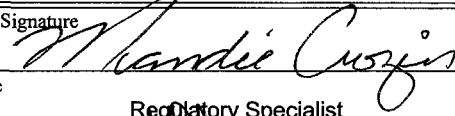
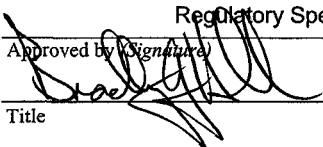
FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-45431
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Newfield Production Company		7. If Unit or CA Agreement, Name and No. Humpback Unit
3a. Address Route #3 Box 3630, Myton UT 84052		8. Lease Name and Well No. Humpback Federal T-23-8-17
3b. Phone No. (include area code) (435) 646-3721		9. API Well No. 43-047-39970
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SE/SE 800' FSL 660' FEL At proposed prod. zone 1435' FSL 55' FEL NESE		10. Field and Pool, or Exploratory Monument Butte
11. Sec., T., R., M., or Blk. and Survey or Area Sec. 23, T8S R17E		12. County or Parish Uintah
13. State UT		14. Distance in miles and direction from nearest town or post office* Approximatley 13.3 miles southeast of Myton, Utah
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 1265' f/ise, 1265' f/unit	16. No. of Acres in lease 548.31	17. Spacing Unit dedicated to this well 20 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1257'	19. Proposed Depth 6680'	20. BLM/BIA Bond No. on file WYB000493
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5067' GL	22. Approximate date work will start* 2 nd Quarter 2008	23. Estimated duration Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |                                                                                                                                                 |                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                                | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.                                                                                                                             | 5. Operator certification.                                                                         |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 3/14/08
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) BRADLEY G. HILL	Date 03-31-08
Title Office	ENVIRONMENTAL MANAGER	

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

MAR 18 2008

DIV. OF OIL, GAS & MINING

Surf

588149 X

4438976 Y

40.09836

-109.96587

Federal Approval of this  
Action is Necessary

BHL

588333 X

4439169 Y

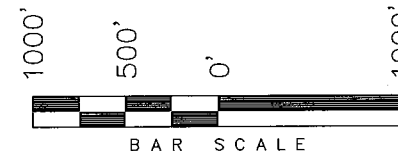
40.10007

-109.96369

**T8S, R17E, S.L.B.&M.**

**NEWFIELD PRODUCTION COMPANY**

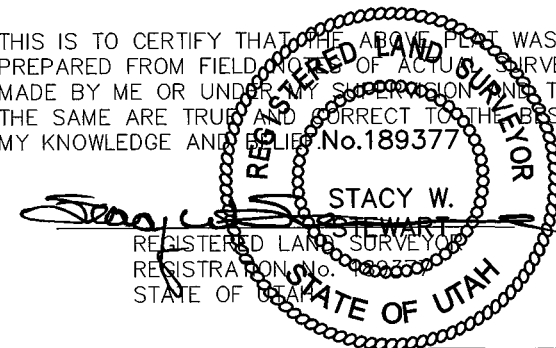
WELL LOCATION, HUMPBACK T-23-8-17,  
LOCATED AS SHOWN IN THE SE 1/4 SE  
1/4 OF SECTION 23, T8S, R17E,  
S.L.B.&M. UTAH COUNTY, UTAH.



**Note:**

1. The bottom of hole footages are 1435' FSL & 55' FEL.

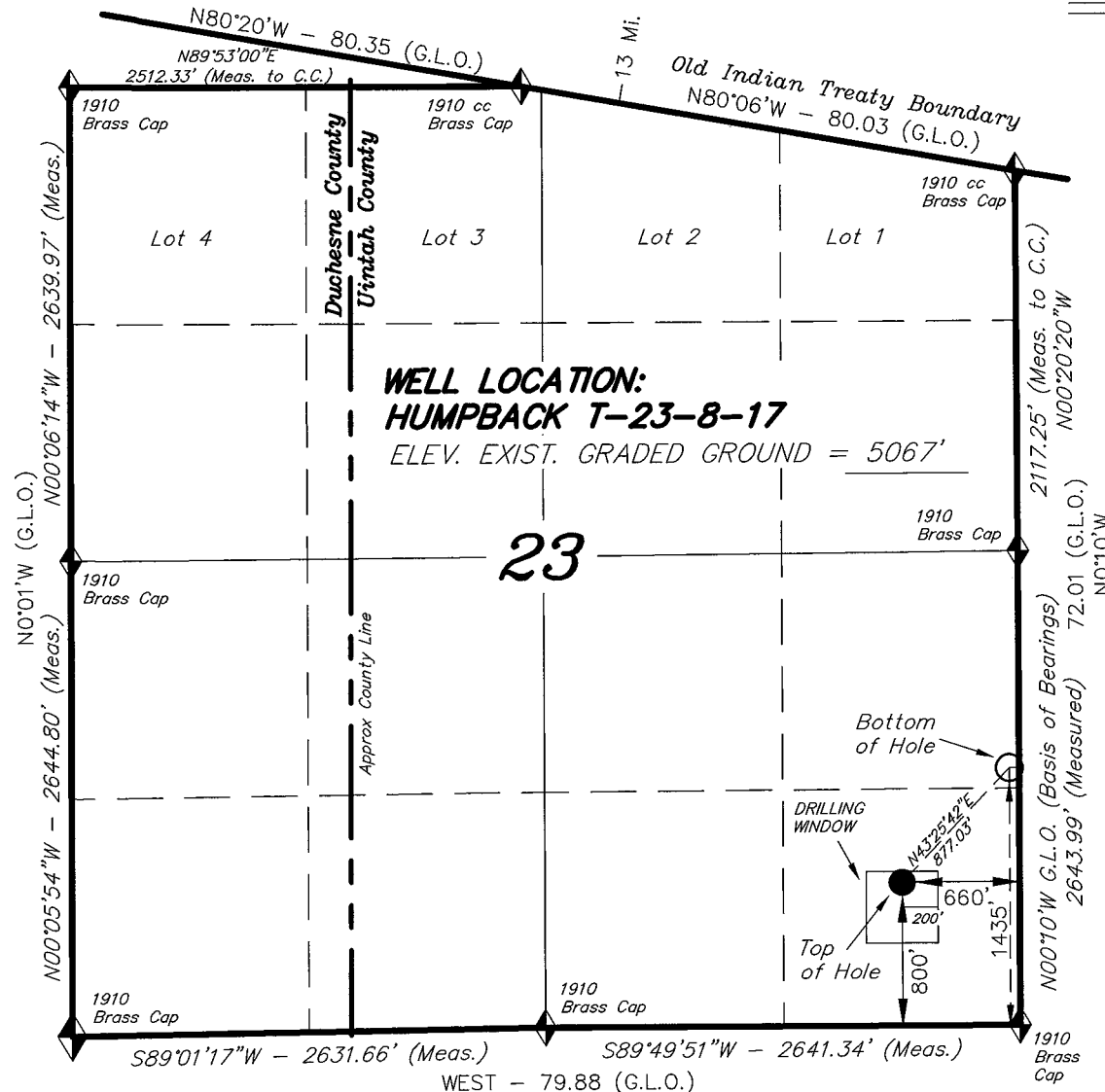
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377



**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
(435) 781-2501

DATE SURVEYED: 12-20-07	SURVEYED BY: D.G.
DATE DRAWN: 01-03-07	DRAWN BY: F.T.M.
REVISED: 02-15-08 L.C.S.	SCALE: 1" = 1000'



◆ = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

**HUMPBACK T-23-8-17**  
**(Surface Location) NAD 83**  
LATITUDE = 40° 05' 54.50"  
LONGITUDE = 109° 58' 00.09"

**NEWFIELD PRODUCTION COMPANY  
HUMPBACK FEDERAL #T-23-8-17  
AT SURFACE: SE/SE SECTION 23, T8S, R17E  
UINTAH COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**DRILLING PROGRAM**

**1. GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1939'
Green River	1939'
Wasatch	6680'

**3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation 1939' – 6680' - Oil

**4. PROPOSED CASING PROGRAM**

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Please refer to the Monument Butte Field SOP. See Exhibit "C".

**6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

Please refer to the Monument Butte Field SOP.

**7. AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Please refer to the Monument Butte Field SOP.

**8. TESTING, LOGGING AND CORING PROGRAMS:**

Please refer to the Monument Butte Field SOP.

**9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

**10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

Please refer to the Monument Butte Field SOP.

**NEWFIELD PRODUCTION COMPANY  
HUMPBACK FEDERAL #T-23-8-17  
AT SURFACE: SE/SE SECTION 23, T8S, R17E  
UINTAH COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site Humpback Federal #T-23-8-17 located in the SE 1/4 SE 1/4 Section 23, T8S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly - 6.8 miles  $\pm$  to it's junction with an existing dirt road to the east; proceed in a easterly direction - 5.1 miles  $\pm$  to it's junction with the beginning of the access road to the existing Humpback 16-23-8-17 well location.

**2. PLANNED ACCESS ROAD**

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Humpback 16-23-8-17 well pad. See attached Topographic Map "B".

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

The proposed well will be drilled directionally off of the Humpback 16-23-8-17 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Humpback Federal T-23-8-17. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

**5. LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District  
Water Right: 43-10136

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-1358

Newfield Collector Well  
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

Please refer to the Monument Butte Field SOP. See Exhibit "A".

6. **SOURCE OF CONSTRUCTION MATERIALS**

The proposed Humpback Federal T-23-8-17 will be drilled off of the existing Humpback 16-23-8-17 well pad. No additional surface disturbance will be required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

Please refer to the Monument Butte Field SOP.

8. **ANCILLARY FACILITIES**

Please refer to the Monument Butte Field SOP.

9. **WELL SITE LAYOUT**

See attached Location Layout Diagram.

10. **PLANS FOR RESTORATION OF SURFACE**

Please refer to the Monument Butte Field SOP.

11. **SURFACE OWNERSHIP** - Bureau Of Land Management (Proposed location and access roads leading to).

12. **OTHER ADDITIONAL INFORMATION**

**Water Disposal**

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

**Threatened, Endangered, And Other Sensitive Species**

None for the proposed Humpback Federal T-23-8-17 .

**Reserve Pit Liner**

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

**Location and Reserve Pit Reclamation**

Please refer to the Monument Butte Field SOP.

The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrell Tail	<i>Elymus Elymoides</i>	3 lbs/acre
Siberian Wheatgrass	<i>Agropyron Fragile</i>	1 lbs/acre
Gardner Saltbush	<i>Atriplex Gardneri</i>	0.5 lbs/acre
Shadscale	<i>Atriplex Confertifolia</i>	0.5 lbs/acre
Fourwing Saltbush	<i>Atriplex Canescens</i>	0.5 lbs/acre
Scarlet Globemallow	<i>Sphaeralcea Conccinea</i>	0.10 lbs/acre

**Details of the On-Site Inspection**

The proposed Humpback Federal T-23-8-17 was on-sited on 2/28/08. The following were present; Dave Allred (Newfield Production), Kevan Stevens (Newfield Production ), Michael Cutler (Bureau of Land Management), and Dave Gordon (Bureau of Land Management). Weather conditions were clear and ground covered by snow.

**LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION**

**Representative**

Name: Kevan Stevens  
Address: Route #3 Box 3630  
Myton, UT 84052  
Telephone: (435) 646-3721

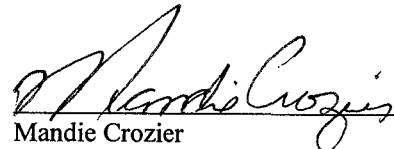
**Certification**

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #T-23-8-17 Section 23, Township 8S, Range 17E: Lease UTU-45431 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drillsite and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

3/14/08

Date



Mandie Crozier  
Regulatory Specialist  
Newfield Production Company



**Scientific Drilling**  
Rocky Mountain Operations

Project: Uintah County, UT NAD83 UTC  
Site: Humpback  
Well: Humpback T-23-8-17  
Wellbore: OH  
Design: Plan #1

**Newfield Exploration Co.**

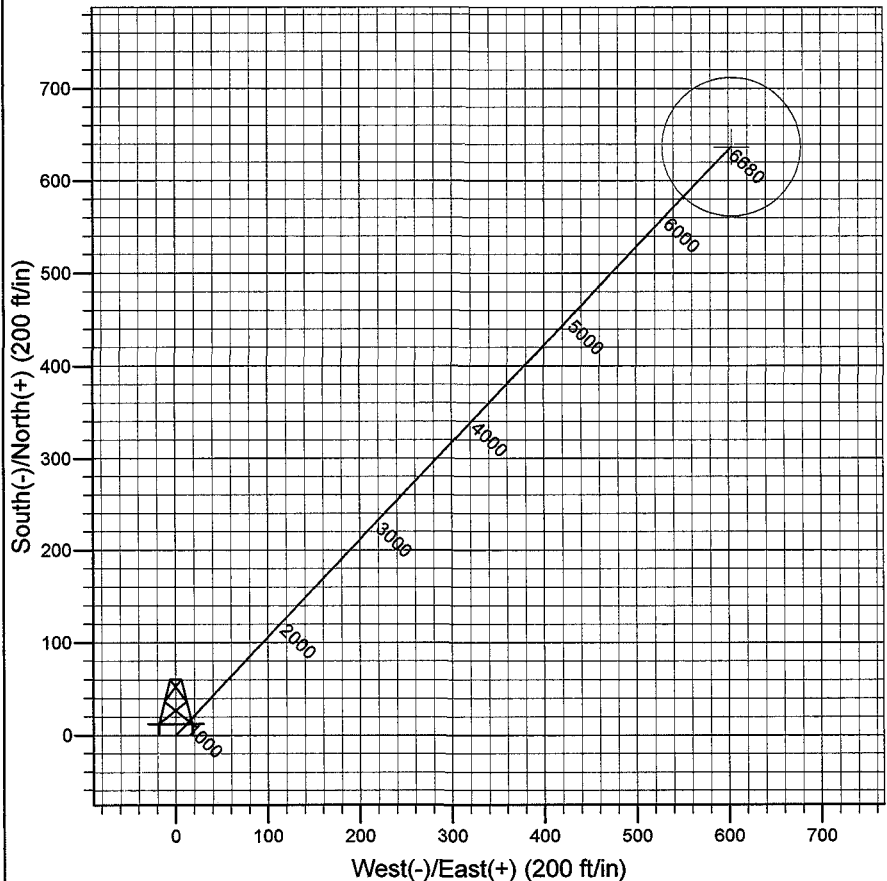
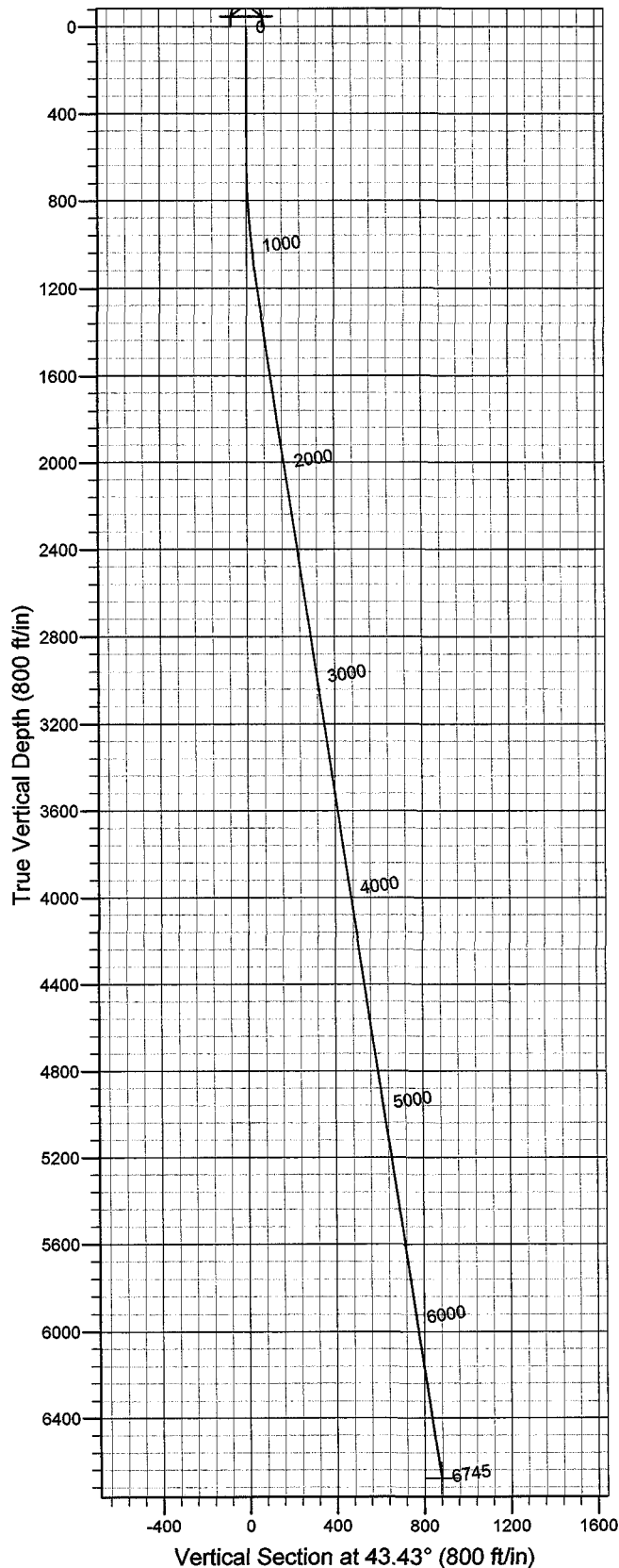


Azimuths to True North  
Magnetic North: 11.69°

Magnetic Field  
Strength: 52667.1snT  
Dip Angle: 65.95°  
Date: 2008-02-25  
Model: IGRF2005-10

WELL DETAILS: Humpback T-23-8-17

GL 5067' & RKB 12' @ 5079.00ft (NDSI 2) 5067.00  
+N/-S +E/-W Northing Easting Latitude Longitude  
0.00 0.00 7208283.41 2069319.50 40° 5' 54.500 N 109° 58' 0.090 W



Plan: Plan #1 (Humpback T-23-8-17/OH)

Created By: Julie Cruse Date: 2008-02-25

PROJECT DETAILS: Uintah County, UT NAD83 UTC

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Utah Central Zone  
Location:  
System Datum: Mean Sea Level  
Local North: True North

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
3	1173.98	8.61	43.43	1171.82	31.26	29.59	1.50	43.43	43.04	
4	6744.94	8.61	43.43	6680.00	636.91	602.93	0.00	0.00	877.03	H T-23-8-17 PBHL

# **Newfield Exploration Co.**

**Uintah County, UT NAD83 UTC**

**Humpback**

**Humpback T-23-8-17**

**OH**

**Plan: Plan #1**

## **Standard Planning Report**

**25 February, 2008**



# Scientific Drilling

## Planning Report

**Database:** EDM 2003.16 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Uintah County, UT NAD83 UTC  
**Site:** Humpback  
**Well:** Humpback T-23-8-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Humpback T-23-8-17  
**TVD Reference:** GL 5067' & RKB 12' @ 5079.00ft (NDSI 2)  
**MD Reference:** GL 5067' & RKB 12' @ 5079.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

<b>Project</b>	Uintah County, UT NAD83 UTC		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone		

<b>Site</b>	Humpback		
<b>Site Position:</b>		<b>Northing:</b>	7,205,829.64 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,071,750.01 ft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	in
		<b>Latitude:</b>	40° 5' 29.840 N
		<b>Longitude:</b>	109° 57' 29.360 W
		<b>Grid Convergence:</b>	0.99 °

<b>Well</b>	Humpback T-23-8-17, 800' FSL 660' FEL Sec 23 T8S R17E		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 7,208,283.41 ft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 2,069,319.50 ft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 5' 54.500 N
		<b>Longitude:</b>	109° 58' 0.090 W
		<b>Ground Level:</b>	5,067.00 ft

<b>Wellbore</b>	OH		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF2005-10	2008-02-25	11.69
			<b>Dip Angle (°)</b>
			65.95
			<b>Field Strength (nT)</b>
			52,667

<b>Design</b>	Plan #1		
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			<b>Direction (°)</b>
			43.43

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,173.98	8.61	43.43	1,171.82	31.26	29.59	1.50	1.50	0.00	43.43	
6,744.94	8.61	43.43	6,680.00	636.91	602.93	0.00	0.00	0.00	0.00	H T-23-8-17 PBHL

# Scientific Drilling

## Planning Report

**Database:** EDM 2003.16 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Uintah County, UT NAD83 UTC  
**Site:** Humpback  
**Well:** Humpback T-23-8-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Humpback T-23-8-17  
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**MD Reference:** GL 5067' & RKB 12' @ 5079.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	1.50	43.43	699.99	0.95	0.90	1.31	1.50	1.50	0.00
800.00	3.00	43.43	799.91	3.80	3.60	5.23	1.50	1.50	0.00
900.00	4.50	43.43	899.69	8.55	8.09	11.77	1.50	1.50	0.00
1,000.00	6.00	43.43	999.27	15.20	14.39	20.92	1.50	1.50	0.00
1,100.00	7.50	43.43	1,098.57	23.73	22.47	32.68	1.50	1.50	0.00
1,173.98	8.61	43.43	1,171.82	31.26	29.59	43.04	1.50	1.50	0.00
1,200.00	8.61	43.43	1,197.55	34.09	32.27	46.94	0.00	0.00	0.00
1,300.00	8.61	43.43	1,296.42	44.96	42.56	61.91	0.00	0.00	0.00
1,400.00	8.61	43.43	1,395.30	55.83	52.85	76.88	0.00	0.00	0.00
1,500.00	8.61	43.43	1,494.17	66.70	63.14	91.85	0.00	0.00	0.00
1,600.00	8.61	43.43	1,593.04	77.57	73.44	106.82	0.00	0.00	0.00
1,700.00	8.61	43.43	1,691.91	88.45	83.73	121.79	0.00	0.00	0.00
1,800.00	8.61	43.43	1,790.79	99.32	94.02	136.76	0.00	0.00	0.00
1,900.00	8.61	43.43	1,889.66	110.19	104.31	151.73	0.00	0.00	0.00
2,000.00	8.61	43.43	1,988.53	121.06	114.60	166.70	0.00	0.00	0.00
2,100.00	8.61	43.43	2,087.41	131.93	124.89	181.67	0.00	0.00	0.00
2,200.00	8.61	43.43	2,186.28	142.80	135.18	196.64	0.00	0.00	0.00
2,300.00	8.61	43.43	2,285.15	153.68	145.48	211.61	0.00	0.00	0.00
2,400.00	8.61	43.43	2,384.03	164.55	155.77	226.58	0.00	0.00	0.00
2,500.00	8.61	43.43	2,482.90	175.42	166.06	241.55	0.00	0.00	0.00
2,600.00	8.61	43.43	2,581.77	186.29	176.35	256.52	0.00	0.00	0.00
2,700.00	8.61	43.43	2,680.65	197.16	186.64	271.49	0.00	0.00	0.00
2,800.00	8.61	43.43	2,779.52	208.03	196.93	286.46	0.00	0.00	0.00
2,900.00	8.61	43.43	2,878.39	218.91	207.23	301.43	0.00	0.00	0.00
3,000.00	8.61	43.43	2,977.27	229.78	217.52	316.40	0.00	0.00	0.00
3,100.00	8.61	43.43	3,076.14	240.65	227.81	331.37	0.00	0.00	0.00
3,200.00	8.61	43.43	3,175.01	251.52	238.10	346.34	0.00	0.00	0.00
3,300.00	8.61	43.43	3,273.88	262.39	248.39	361.31	0.00	0.00	0.00
3,400.00	8.61	43.43	3,372.76	273.26	258.68	376.28	0.00	0.00	0.00
3,500.00	8.61	43.43	3,471.63	284.14	268.98	391.26	0.00	0.00	0.00
3,600.00	8.61	43.43	3,570.50	295.01	279.27	406.23	0.00	0.00	0.00
3,700.00	8.61	43.43	3,669.38	305.88	289.56	421.20	0.00	0.00	0.00
3,800.00	8.61	43.43	3,768.25	316.75	299.85	436.17	0.00	0.00	0.00
3,900.00	8.61	43.43	3,867.12	327.62	310.14	451.14	0.00	0.00	0.00
4,000.00	8.61	43.43	3,966.00	338.49	320.43	466.11	0.00	0.00	0.00
4,100.00	8.61	43.43	4,064.87	349.36	330.72	481.08	0.00	0.00	0.00
4,200.00	8.61	43.43	4,163.74	360.24	341.02	496.05	0.00	0.00	0.00
4,300.00	8.61	43.43	4,262.62	371.11	351.31	511.02	0.00	0.00	0.00
4,400.00	8.61	43.43	4,361.49	381.98	361.60	525.99	0.00	0.00	0.00
4,500.00	8.61	43.43	4,460.36	392.85	371.89	540.96	0.00	0.00	0.00
4,600.00	8.61	43.43	4,559.23	403.72	382.18	555.93	0.00	0.00	0.00
4,700.00	8.61	43.43	4,658.11	414.59	392.47	570.90	0.00	0.00	0.00
4,800.00	8.61	43.43	4,756.98	425.47	402.77	585.87	0.00	0.00	0.00
4,900.00	8.61	43.43	4,855.85	436.34	413.06	600.84	0.00	0.00	0.00
5,000.00	8.61	43.43	4,954.73	447.21	423.35	615.81	0.00	0.00	0.00
5,100.00	8.61	43.43	5,053.60	458.08	433.64	630.78	0.00	0.00	0.00
5,200.00	8.61	43.43	5,152.47	468.95	443.93	645.75	0.00	0.00	0.00

# Scientific Drilling

## Planning Report

**Database:** EDM 2003.16 Single User Db  
**Company:** Newfield Exploration Co.  
**Project:** Uintah County, UT NAD83 UTC  
**Site:** Humpback  
**Well:** Humpback T-23-8-17  
**Wellbore:** OH  
**Design:** Plan #1

**Local Co-ordinate Reference:** Well Humpback T-23-8-17  
**TVD Reference:** GL 5067' & RKB 12' @ 5079.00ft (NDSI 2)  
**MD Reference:** GL 5067' & RKB 12' @ 5079.00ft (NDSI 2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	8.61	43.43	5,251.35	479.82	454.22	660.72	0.00	0.00	0.00
5,400.00	8.61	43.43	5,350.22	490.70	464.51	675.69	0.00	0.00	0.00
5,500.00	8.61	43.43	5,449.09	501.57	474.81	690.66	0.00	0.00	0.00
5,600.00	8.61	43.43	5,547.97	512.44	485.10	705.63	0.00	0.00	0.00
5,700.00	8.61	43.43	5,646.84	523.31	495.39	720.60	0.00	0.00	0.00
5,800.00	8.61	43.43	5,745.71	534.18	505.68	735.57	0.00	0.00	0.00
5,900.00	8.61	43.43	5,844.59	545.05	515.97	750.54	0.00	0.00	0.00
6,000.00	8.61	43.43	5,943.46	555.93	526.26	765.51	0.00	0.00	0.00
6,100.00	8.61	43.43	6,042.33	566.80	536.56	780.48	0.00	0.00	0.00
6,200.00	8.61	43.43	6,141.20	577.67	546.85	795.45	0.00	0.00	0.00
6,300.00	8.61	43.43	6,240.08	588.54	557.14	810.42	0.00	0.00	0.00
6,400.00	8.61	43.43	6,338.95	599.41	567.43	825.39	0.00	0.00	0.00
6,500.00	8.61	43.43	6,437.82	610.28	577.72	840.36	0.00	0.00	0.00
6,600.00	8.61	43.43	6,536.70	621.16	588.01	855.33	0.00	0.00	0.00
6,700.00	8.61	43.43	6,635.57	632.03	598.31	870.30	0.00	0.00	0.00
6,744.94	8.61	43.43	6,680.00	636.91	602.93	877.03	0.00	0.00	0.00

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
H T-23-8-17 PBHL - plan hits target center - Circle (radius 75.00)	0.00	0.00	6,680.00	636.91	602.93	7,208,930.56	2,069,911.42	40° 6' 0.795 N	109° 57' 52.331 W

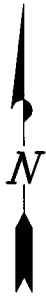
# NEWFIELD PRODUCTION COMPANY

## WELL PAD INTERFERENCE PLAT

**HUMPBAC T-23-8-17 (Proposed Well)**

**HUMPBAC 16-23-8-17 (Existing Well)**

Pad Location: SESE Section 23, T8S, R17E, S.L.B.&M.

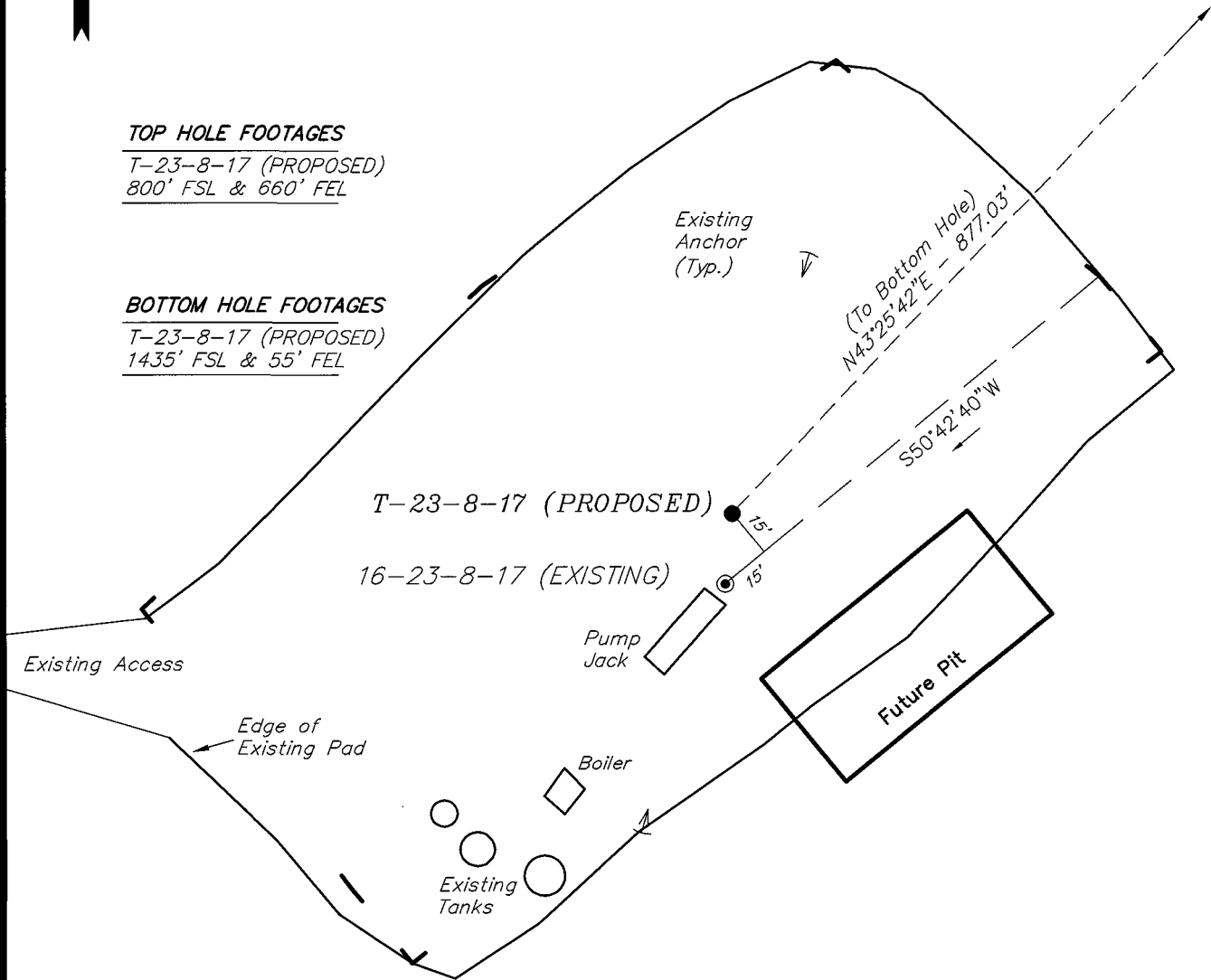


### TOP HOLE FOOTAGES

T-23-8-17 (PROPOSED)  
800' FSL & 660' FEL

### BOTTOM HOLE FOOTAGES

T-23-8-17 (PROPOSED)  
1435' FSL & 55' FEL



### Note:

Bearings are based on  
GLO Information.

### RELATIVE COORDINATES From top hole to bottom hole

WELL	NORTH	EAST
T-23-8-17	637'	603'

### LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
T-23-8-17	40° 05' 54.50"	109° 58' 00.09"
16-23-8-17	40° 05' 54.29"	109° 58' 00.12"

SURVEYED BY: D.G. DATE SURVEYED: 12-20-07  
DRAWN BY: F.T.M. DATE DRAWN: 01-03-08  
SCALE: 1" = 50' REVISED: L.C.S. 02-15-08

**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

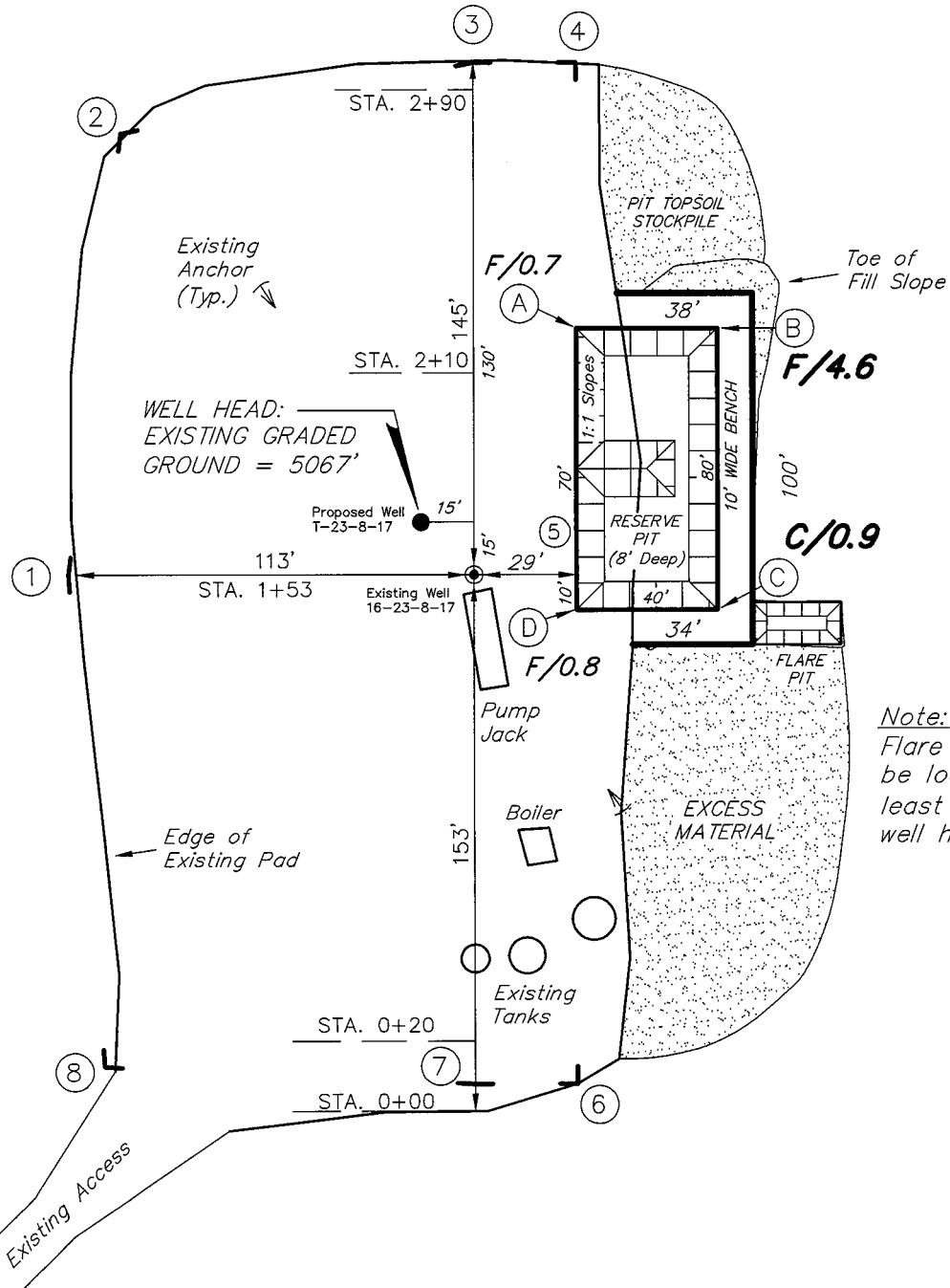
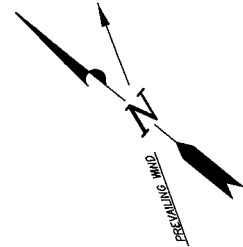
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

**HUMPBAC T-23-8-17 (Proposed Well)**

**HUMPBAC 16-23-8-17 (Existing Well)**

Pad Location: SESE Section 23, T8S, R17E, S.L.B.&M.



SURVEYED BY: D.G.	DATE SURVEYED: 12-20-07
DRAWN BY: F.T.M.	DATE DRAWN: 01-03-08
SCALE: 1" = 50'	REVISED:

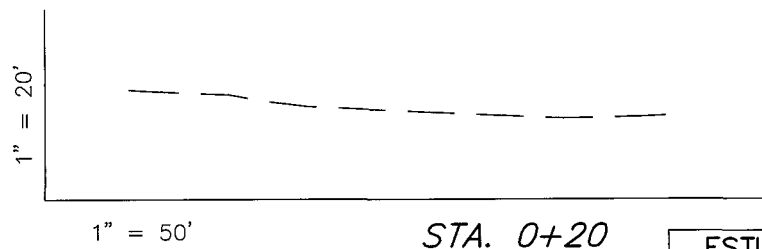
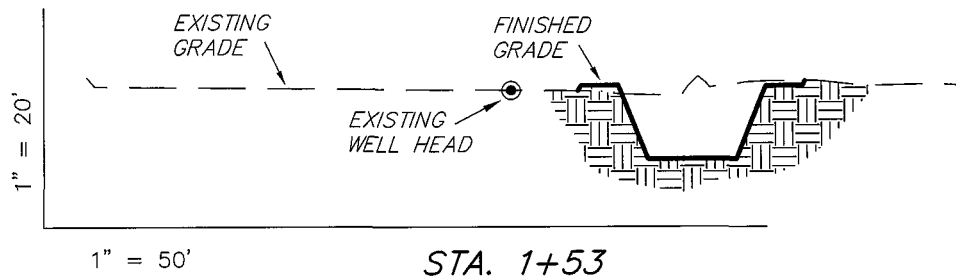
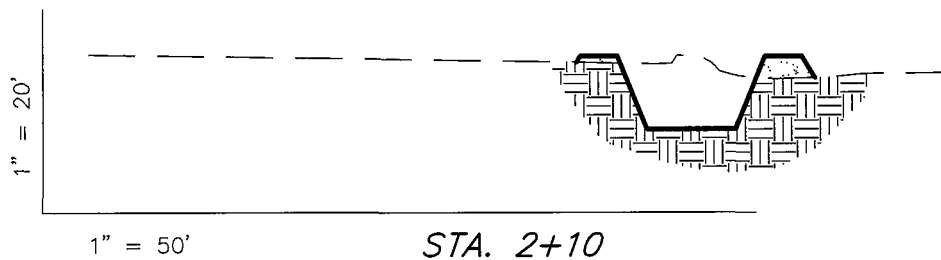
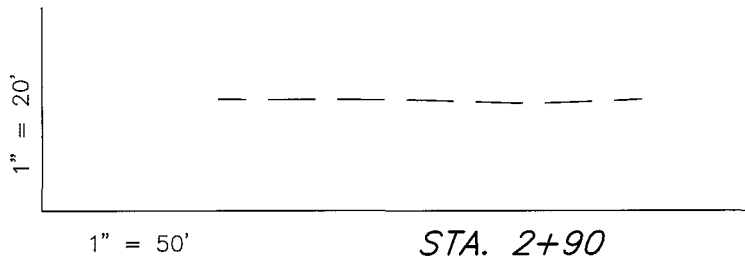
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078  
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

HUMPBACK T-23-8-17 (Proposed Well)

HUMPBACK 16-23-8-17 (Existing Well)



NOTE:  
UNLESS OTHERWISE NOTED  
CUT SLOPES ARE AT 1:1  
FILL SLOPES ARE AT 1.5:1

### ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	0	160	Topsoil is not included in Pad Cut	-160
PIT	570	0		570
TOTALS	570	160	130	410

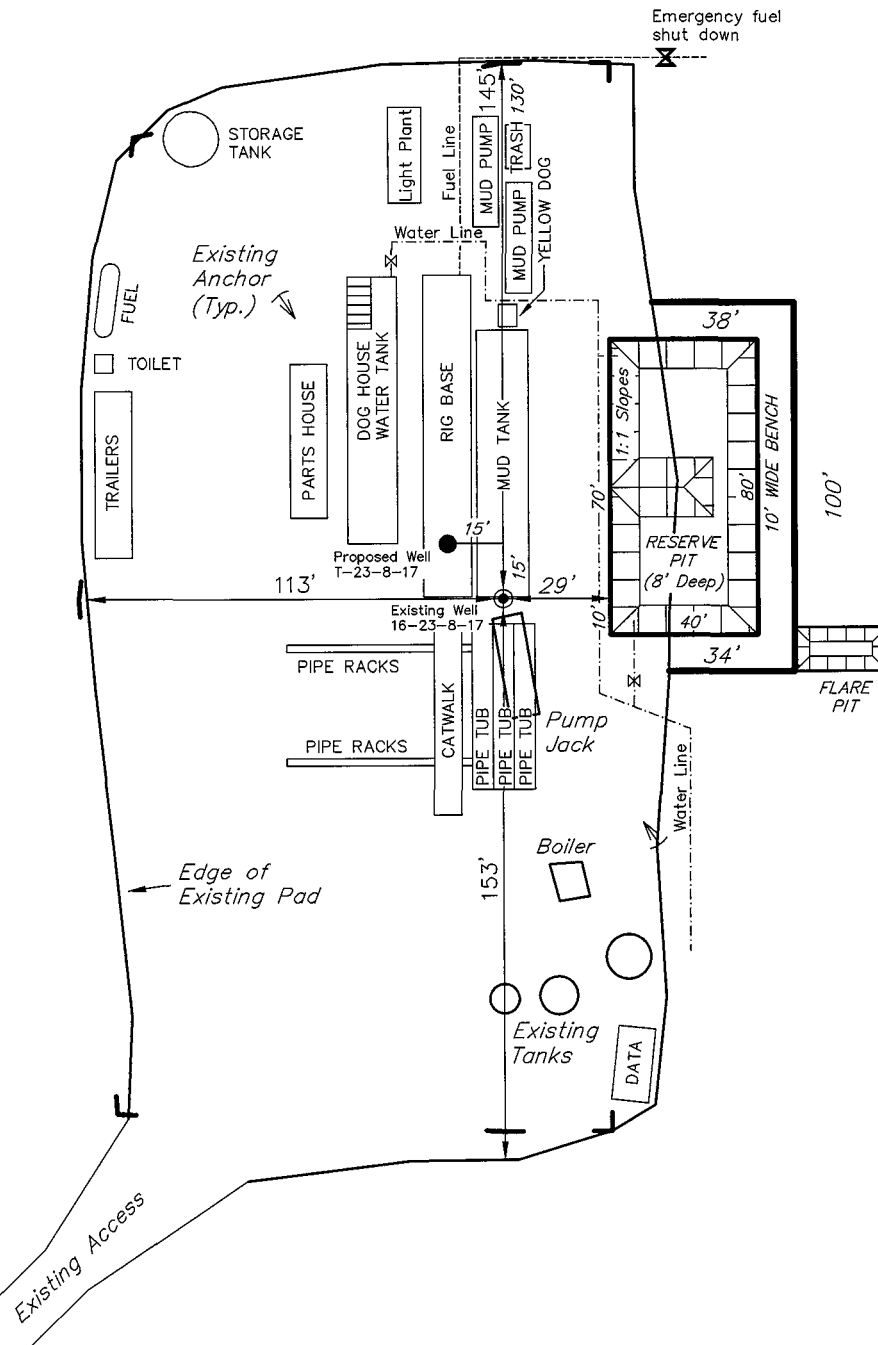
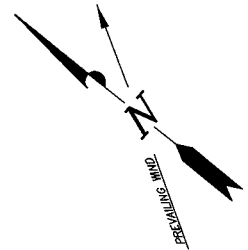
SURVEYED BY: D.G. DATE SURVEYED: 12-20-07  
DRAWN BY: F.T.M. DATE DRAWN: 01-03-08  
SCALE: 1" = 50' REVISED:

**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

HUMPBACK T-23-8-17 (Proposed Well)  
HUMPBACK 16-23-8-17 (Existing Well)



Note:  
Flare pit is to be located at least 80' from well head.

SURVEYED BY: D.G.	DATE SURVEYED: 12-20-07
DRAWN BY: F.T.M.	DATE DRAWN: 01-03-08
SCALE: 1" = 50'	REVISED:

**Tri State**  
Land Surveying, Inc.  
(435) 781-2501  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# Newfield Production Company

## Proposed Site Facility Diagram

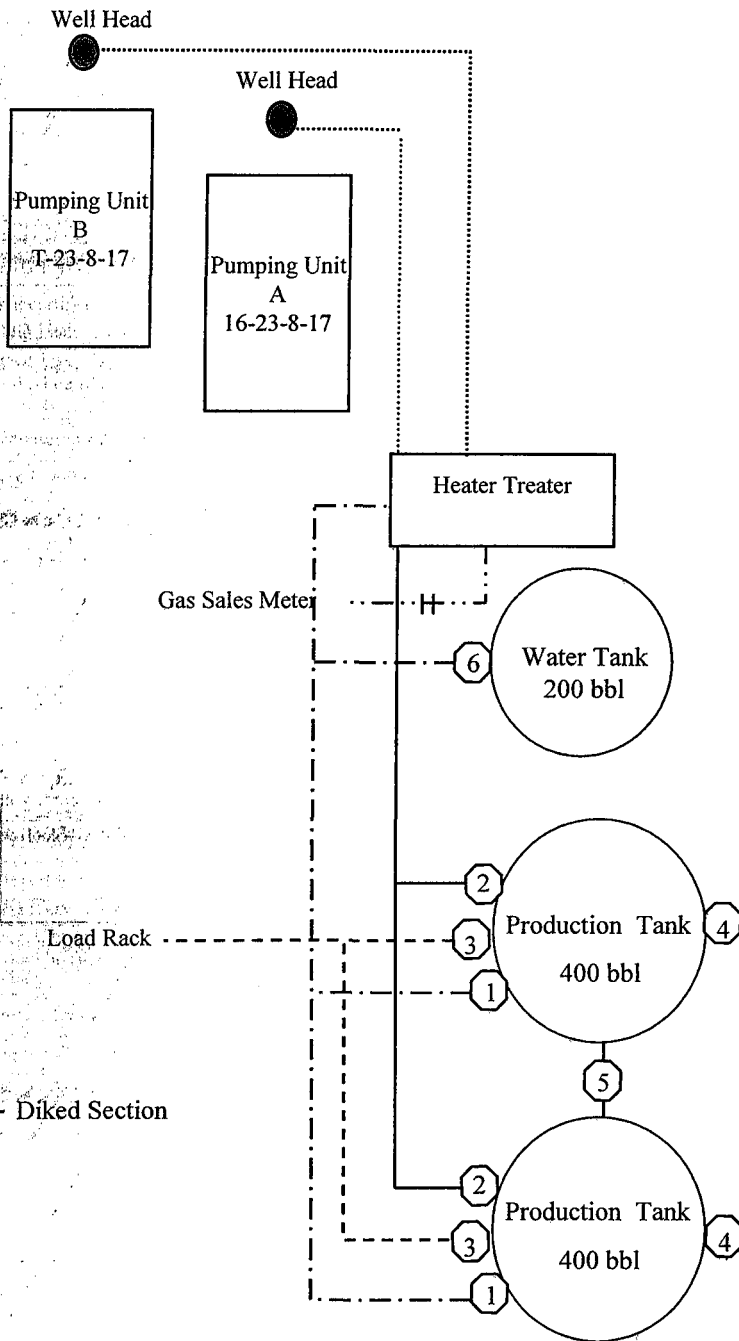
Humpback Federal T-23-8-17

From the 16-23-8-17 Location

SE/SE Sec. 23 T8S, R17E

Uintah County, Utah

UTU-45431



Site Security Plan is held at the Pleasant Valley Office, Duchesne County, Utah

### Production Phase:

- 1) Valves 1, 3, and 4 sealed closed
- 2) Valves 2, 5, and 6 sealed open

### Sales Phase:

- 1) Valves 1, 2, 4, 5, and 6 sealed closed
- 2) Valve 3 open

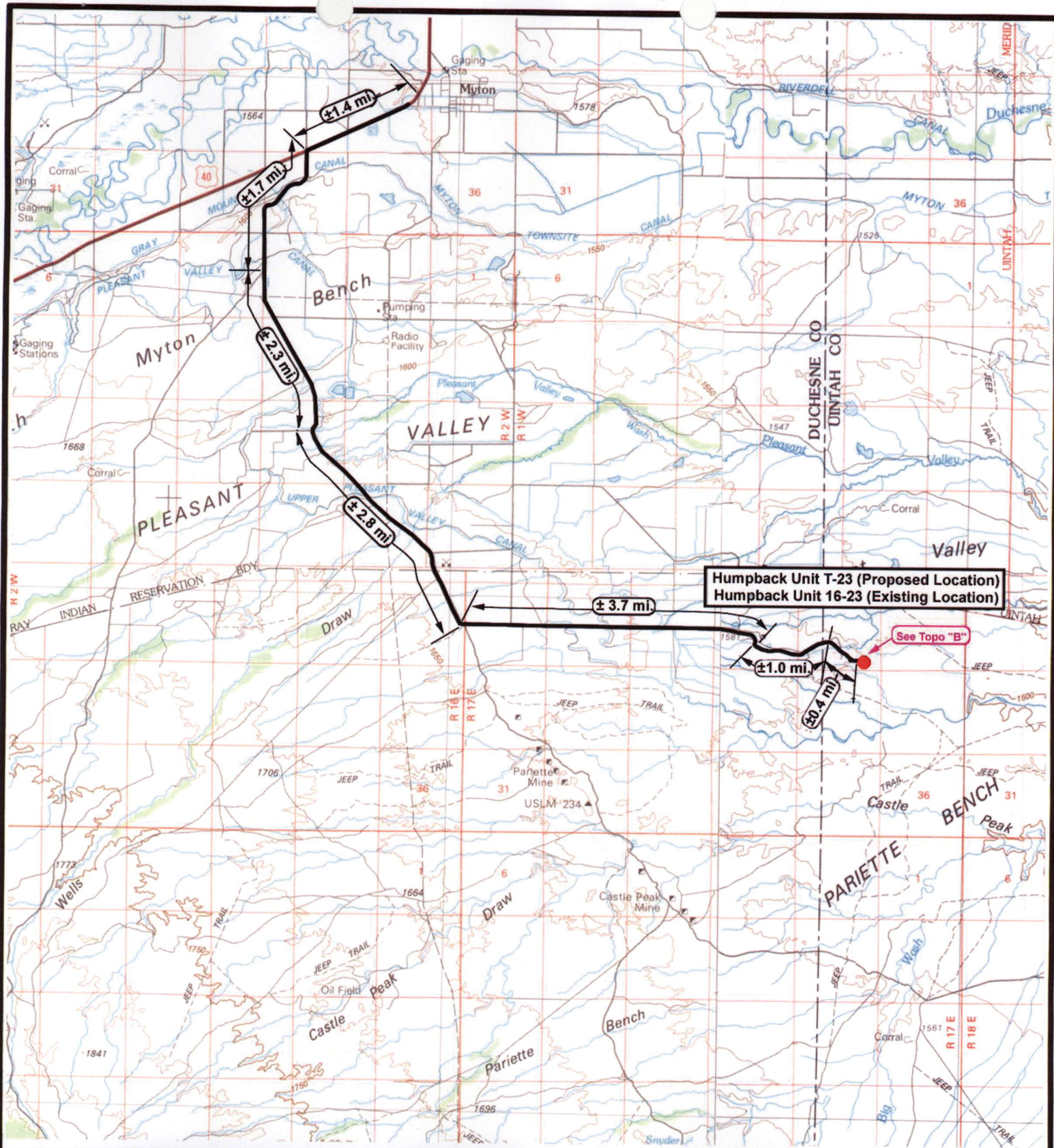
### Draining Phase:

- 1) Valves 1 and 6 open

### Legend


Emulsion Line	.....
Load Rack	-----
Water Line	- . - . - .
Gas Sales	.....
Oil Line	—————





Humpback Unit T-23 (Proposed Location)  
Humpback Unit 16-23 (Existing Location)

See Topo "B"



**NEWFIELD**  
Exploration Company

---

**Humpback Unit T-23-8-17 (Proposed Well)**  
**Humpback Unit 16-23-8-17 (Proposed Well)**  
 Pad Location: SESE SEC. 23, T8S, R17E, S.L.zzB.&M.



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
38 West 100 North Vernal, Utah 84078

---

SCALE: 1" = 100,000'  
 DRAWN BY: nc  
 DATE: 01-10-2007

**Legend**

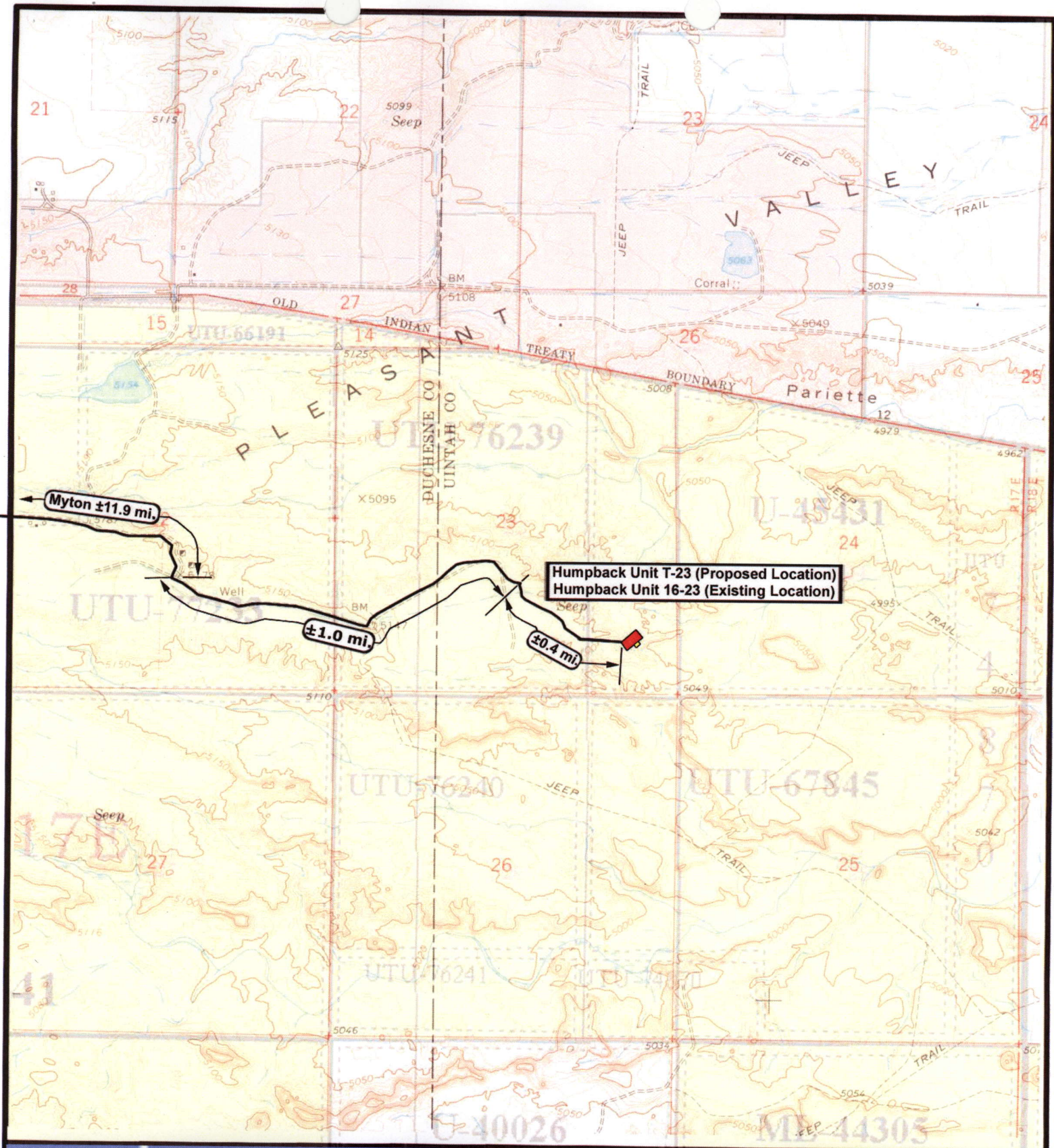
Existing Road


---

TOPOGRAPHIC MAP

"A"







**NEWFIELD**  
Exploration Company

---

**Humpback Unit T-23-8-17 (Proposed Location)**  
**Humpback Unit 16-23-8-17 (Proposed Location)**  
**Pad Location SESE SEC. 23, T8S, R17E, S.L.B.&M.**



**Tri-State**  
Land Surveying Inc.  
(435) 781-2501  
180 North Vernal Ave. Vernal, Utah 84078

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SCALE: 1" = 2000'  
 DRAWN BY: nc  
 DATE: 01-10-2008

**Legend**

Existing Road

---

TOPOGRAPHIC MAP

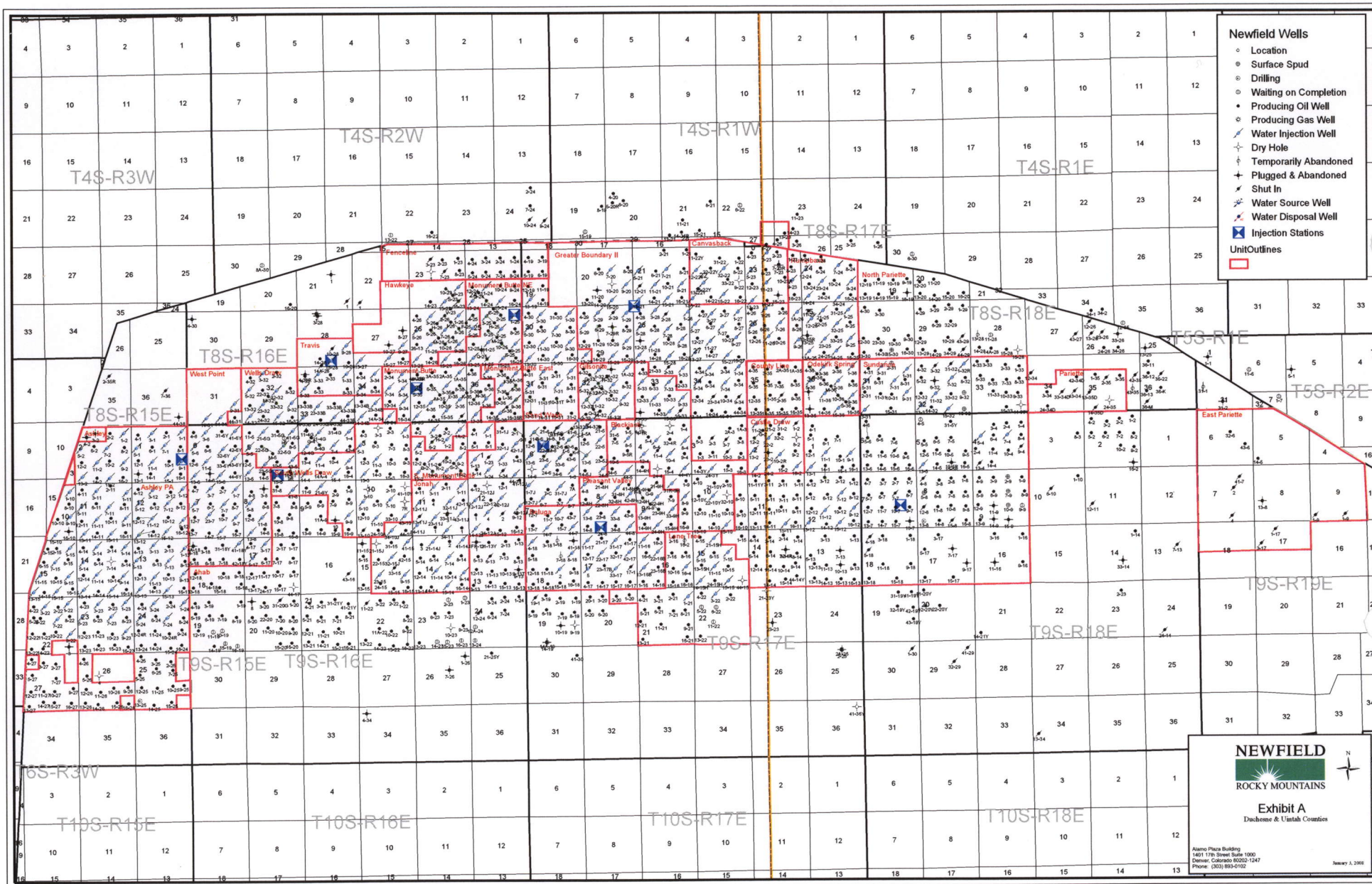
"B"



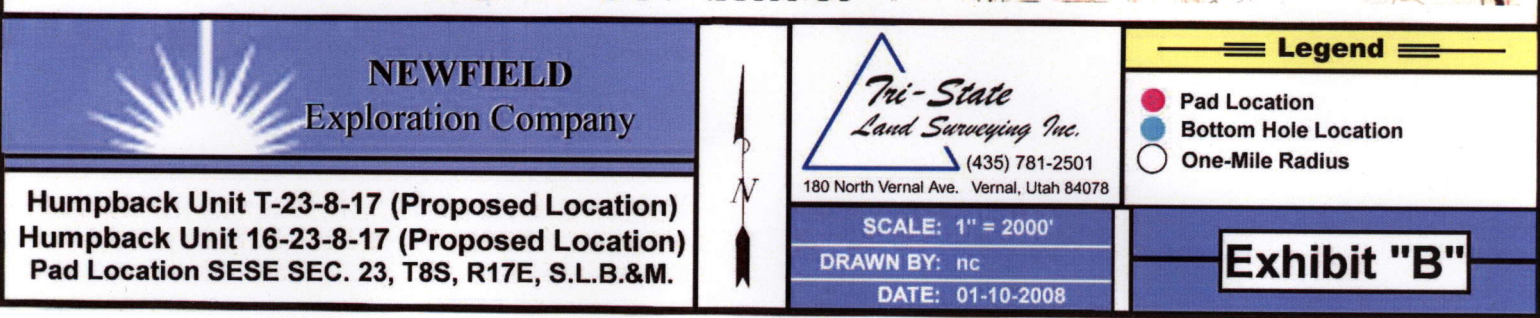
**Legend**

Existing Road



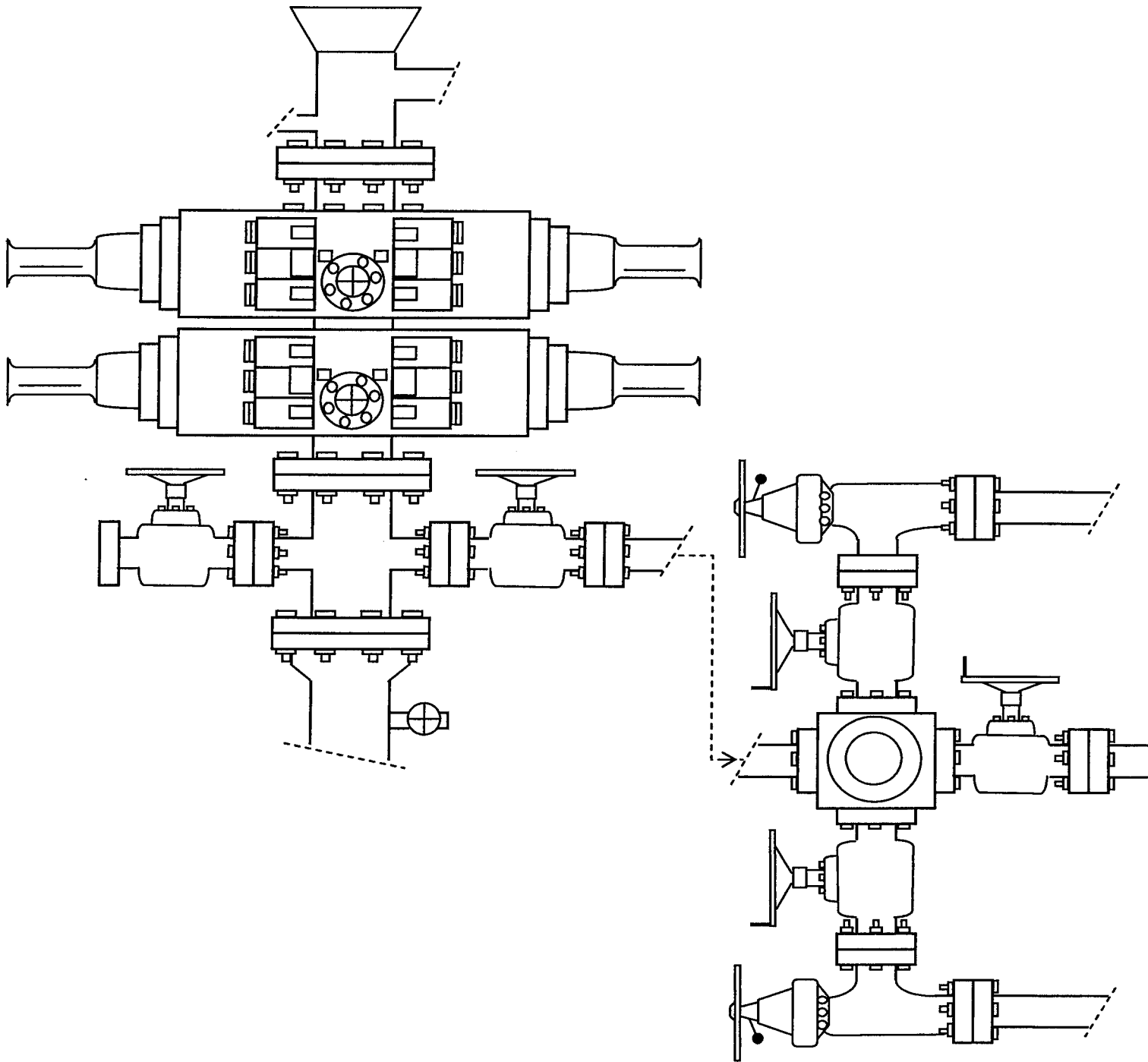








**2-M SYSTEM**  
Blowout Prevention Equipment Systems



**EXHIBIT C**

**WORKSHEET**  
**APPLICATION FOR PERMIT TO DRILL**

APD RECEIVED: 03/18/2008

API NO. ASSIGNED: 43-047-39970

WELL NAME: HUMPBAC FED T-23-8-17

OPERATOR: NEWFIELD PRODUCTION ( N2695 )

PHONE NUMBER: 435-646-3721

CONTACT: MANDIE CROZIER

PROPOSED LOCATION:

SESE 23 080S 170E

SURFACE: 0800 FSL 0660 FEL

BOTTOM: 1435 FSL 0055 FEL

COUNTY: UINTAH

LATITUDE: 40.09836 LONGITUDE: -109.9659

UTM SURF EASTINGS: 588149 NORTHINGS: 4438976

FIELD NAME: MONUMENT BUTTE ( 105 )

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-45431

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: GRRV

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

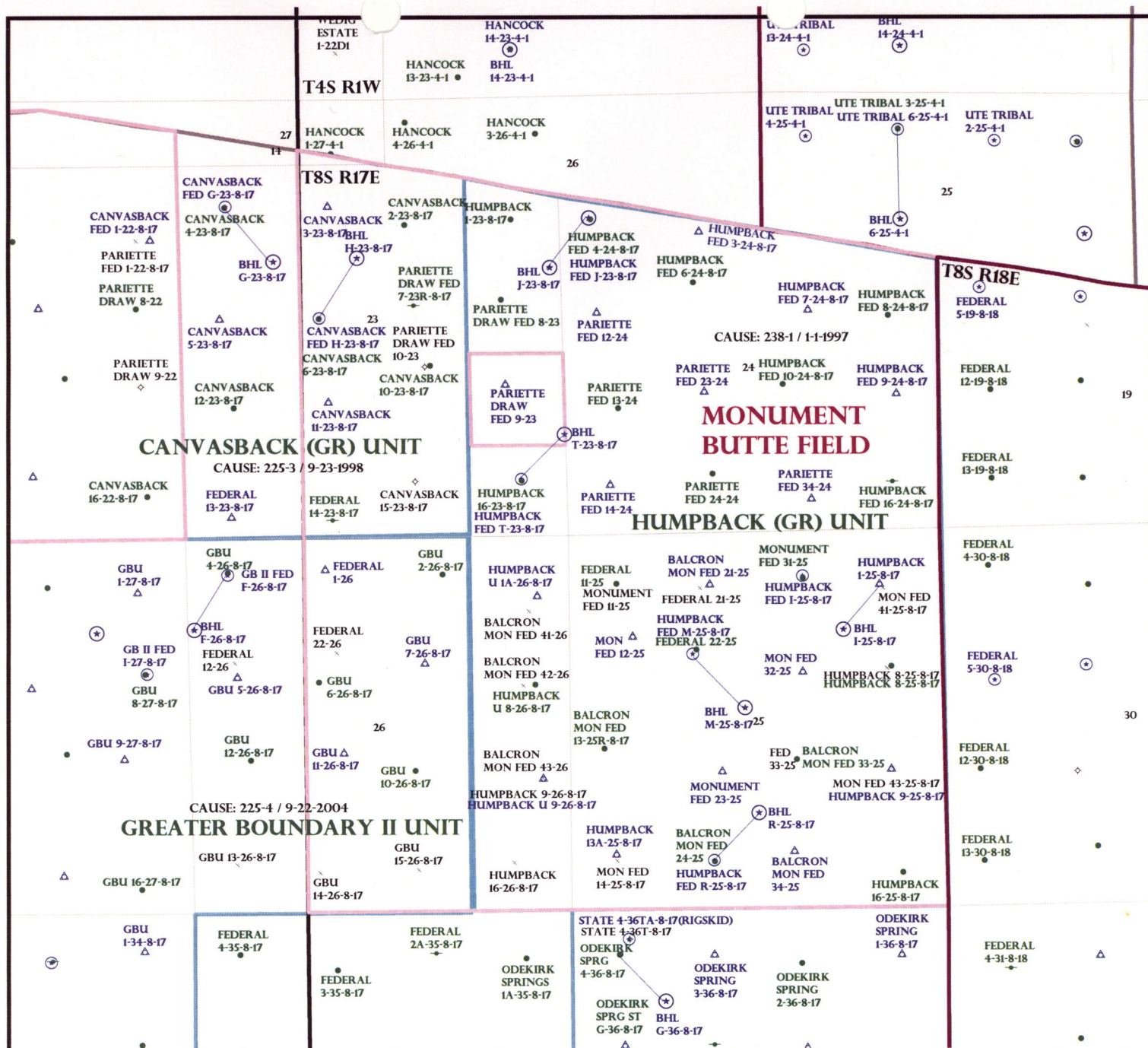
☒ Plat  
☒ Bond: Fed[1] Ind[] Sta[] Fee[]  
(No. WYB000493 )  
☒ Potash (Y/N)  
☒ Oil Shale 190-5 (B) or 190-3 or 190-13  
☒ Water Permit  
(No. 43-10136 )  
☒ RDCC Review (Y/N)  
(Date: \_\_\_\_\_ )  
☒ Fee Surf Agreement (Y/N)  
☒ Intent to Commingle (Y/N)

LOCATION AND SITING:

       R649-2-3.  
Unit: HUMPBAC (GRRV)  
       R649-3-2. General  
Siting: 460 From Qtr/Qtr & 920' Between Wells  
       R649-3-3. Exception  
☒ Drilling Unit  
Board Cause No: 2381  
Eff Date: 1-1-1997  
Siting: Does not Suspend General Siting  
☒ R649-3-11. Directional Drill

COMMENTS: See, Separate File

STIPULATIONS: 1- Fed. Approval



OPERATOR: NEWFIELD PROD CO (N2695)

SEC: 23,24,25 T.8S R. 17E

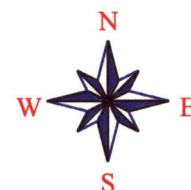
FIELD: MONUMENT BUTTE (105)

COUNTY: DUCHESNE

CAUSE: 238-1 / 1-1-1997



OIL, GAS & MINING



PREPARED BY: DIANA MASON  
DATE: 26-MARCH-2008





March 24, 2008

State of Utah, Division of Oil, Gas and Mining  
ATTN: Diana Mason  
PO Box 145801  
Salt Lake City, UT 84114-5801

RE: Directional Drilling  
**Humpback Federal T-23-8-17**  
Humpback Unit  
UTU-76189X  
Surface Hole: T8S R17E, Section 23: SESE  
800' FSL 660' FEL  
Bottom Hole: T8S R17E, Section 23  
1435' FSL 55' FEL  
Uintah County, Utah

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated March 14, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and target location of this well are both within the boundaries of the Humpback Federal Unit UTU-76189X. Newfield certifies that it is the Humpback Unit Operator and all lands within 460 feet of the entire directional well bore are within the Humpback Unit.

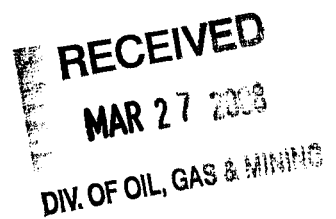
NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at [reveland@newfield.com](mailto:reveland@newfield.com). Your consideration of this matter is greatly appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Roxann Eveland".

Roxann Eveland  
Land Associate



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

5. Lease Serial No.

UTU-45431

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA Agreement, Name and No.

Humpback Unit

8. Lease Name and Well No.

Humpback Federal T-23-8-17

9. API Well No.

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Newfield Production Company

3a. Address

Route #3 Box 3630, Myton UT 84052

3b. Phone No. (include area code)

(435) 646-3721

4. Location of Well (Report location clearly and in accordance with any State requirements.)\*

At surface SE/SE 800' FSL 660' FEL

At proposed prod. zone 1435' FSL 55' FEL

10. Field and Pool, or Exploratory  
Monument Butte

11. Sec., T., R., M., or Blk. and Survey or Area

Sec. 23, T8S R17E

14. Distance in miles and direction from nearest town or post office\*

Approximately 13.3 miles southeast of Myton, Utah

12. County or Parish

Uintah

13. State

UT

15. Distance from proposed\*

location to nearest  
property or lease line, ft.

(Also to nearest drig. unit line, if any) Approx. 1265' f/ls, 1265' f/unit

16. No. of Acres in lease

548.31

17. Spacing Unit dedicated to this well

20 Acres

18. Distance from proposed location\*

to nearest well, drilling, completed,  
applied for, on this lease, ft.

Approx. 1257'

19. Proposed Depth

6680'

20. BLM/BIA Bond No. on file

WYB000493

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

5067' GL

22. Approximate date work will start\*

2 nd Quarter 2008

23. Estimated duration

Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

3. A Surface Use Plan (if the location is on National Forest System Lands, the  
SUPO shall be filed with the appropriate Forest Service Office).

4. Bond to cover the operations unless covered by an existing bond on file (see  
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the  
authorized officer.

25. Signature

*Mandie Crozier*

Name (Printed/Typed)

Mandie Crozier

Date

3/14/08

Title

Regulatory Specialist

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct  
operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United  
States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

RECEIVED

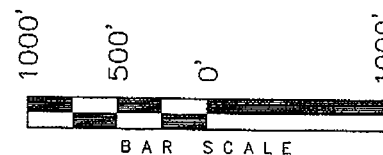
MAR 27 2008

DIV. OF OIL, GAS & MINING

**T8S, R17E, S.L.B.&M.**

*NEWFIELD PRODUCTION COMPANY*

WELL LOCATION, HUMPBACK T-23-8-17,  
LOCATED AS SHOWN IN THE SE 1/4 SE  
1/4 OF SECTION 23, T8S, R17E,  
S.L.B.&M. UINTAH COUNTY, UTAH.



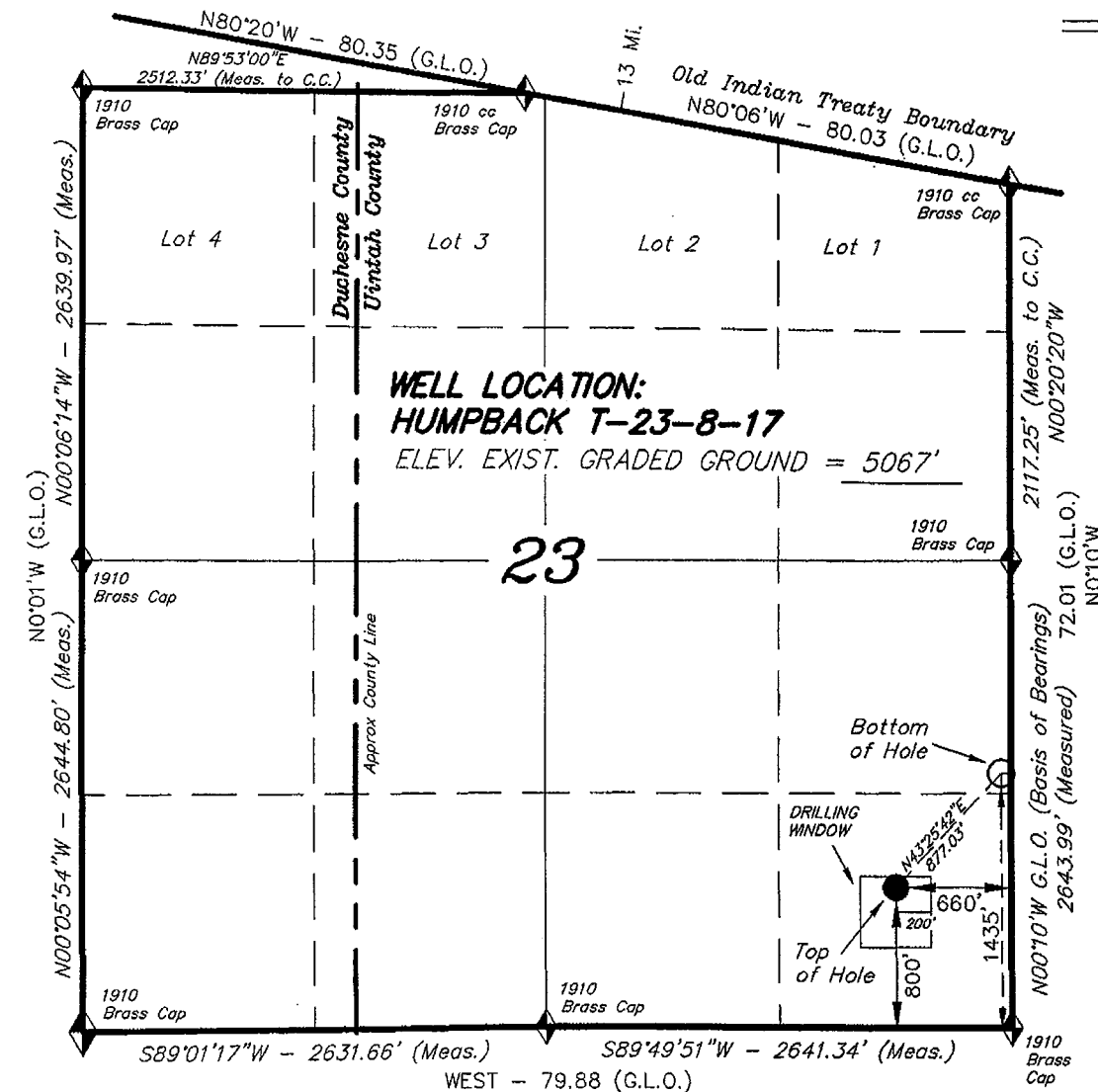
**Note:**


1. The bottom of hole footages are 1435' FSL & 55' FEL.

THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS  
PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS  
MADE BY ME OR UNDER MY SUPERVISION AND THAT  
THE SAME ARE TRUE AND CORRECT TO THE BEST OF  
MY KNOWLEDGE AND BELIEF. No. 189377

STACY W

REGISTERED LAND SURVEYOR  
REGISTRATION No. 128377  
STATE OF UTAH



 = SECTION CORNERS LOCATED

BASIS OF ELEV;  
U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW)

HUMPBAC T-23-8-17  
(Surface Location) NAD 83  
LATITUDE = 40° 05' 54.50"  
LONGITUDE = 109° 58' 00.09"

**TRI STATE LAND SURVEYING & CONSULTING**

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078

(435) 781-2501

DATE SURVEYED:  
12-20-07

SURVEYED BY: D.G.

DATE DRAWN:  
01-03-07

DRAWN BY: F.T.M.

REVISED:  
02-15-08 L.C.S.

SCALE: 1" = 1000'

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

March 31, 2008

### Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2008 Plan of Development Humpback Unit,  
Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Humpback Unit, Uintah County, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ Green River)		
47 43-013-33970	Humpback Fed T-23-8-17	Sec 23 T08S R17E 0800 FSL 0660 FEL BHL Sec 23 T08S R17E 1435 FSL 0055 FEL
47 43-013-33974	Humpback Fed J-23-8-17	Sec 24 T08S R17E 0327 FNL 0433 FWL BHL Sec 23 T08S R17E 1031 FNL 0115 FEL
47 43-013-33971	Humpback Fed I-25-8-17	Sec 25 T08S R17E 0607 FNL 2002 FEL BHL Sec 25 T08S R17E 1370 FNL 1435 FEL
47 43-013-33972	Humpback Fed M-25-8-17	Sec 25 T08S R17E 1692 FNL 1734 FWL BHL Sec 25 T08S R17E 2464 FNL 2466 FWL
47 43-013-33973	Humpback Fed R-25-8-17	Sec 25 T08S R17E 0667 FSL 2014 FWL BHL Sec 25 T08S R17E 1335 FSL 2650 FWL

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).

/s/ Michael L. Coulthard

bcc: File - Humpback Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

MCoulthard:mc:3-31-08



JON M. HUNTSMAN, JR.  
Governor

GARY R. HERBERT  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil Gas and Mining

JOHN R. BAZA  
Division Director

March 31, 2008

Newfield Production Company  
Rt. #3, Box 3630  
Myton, UT 84052

Re: Humpback Federal T-23-8-17 Well, Surface Location 800' FSL, 660' FEL, SE SE, Sec. 23, T. 8 South, R. 17 East, Bottom Location 1435' FSL, 55' FEL, NE SE, Sec. 23, T. 8 South, R. 17 East, Uintah County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-39970.

Sincerely,

Gil Hunt  
Associate Director

pab  
Enclosures

cc: Uintah County Assessor  
Bureau of Land Management, Vernal Office

**Operator:** \_\_\_\_\_ Newfield Production Company  
**Well Name & Number** \_\_\_\_\_ Humpback Federal T-23-8-17  
**API Number:** \_\_\_\_\_ 43-047-39970  
**Lease:** \_\_\_\_\_ UTU-45431

**Surface Location:** SE SE      **Sec.** 23      **T.** 8 South      **R.** 17 East  
**Bottom Location:** NE SE      **Sec.** 23      **T.** 8 South      **R.** 17 East

### Conditions of Approval

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dustin Doucet at (801) 538-5281      (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

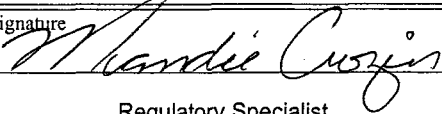
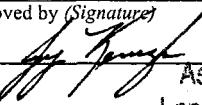
FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-45431
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Newfield Production Company		7. If Unit or CA Agreement, Name and No. Humpback Unit
3a. Address Route #3 Box 3630, Myton UT 84052		8. Lease Name and Well No. Humpback Federal T-23-8-17
3b. Phone No. (include area code) (435) 646-3721		9. API Well No. 43 047 39970
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SE/SE 800' FSL 660' FEL At proposed prod. zone 1435' FSL 55' FEL NESE		10. Field and Pool, or Exploratory Monument Butte
14. Distance in miles and direction from nearest town or post office* Approximatley 13.3 miles southeast of Myton, Utah		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 23, T8S R17E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any) Approx. 1265' f/lse, 1265' f/unit	16. No. of Acres in lease 548.31	17. Spacing Unit dedicated to this well 20 Acres
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1257'	19. Proposed Depth 6680'	20. BLM/BIA Bond No. on file WYB000493
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5067' GL	22. Approximate date work will start* 2 nd Quarter 2008	23. Estimated duration Approximately seven (7) days from spud to rig release.

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- |                                                                                                                                                 |                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1. Well plat certified by a registered surveyor.                                                                                                | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.                                                                                                                             | 5. Operator certification.                                                                         |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature 	Name (Printed/Typed) Mandie Crozier	Date 3/14/08
Title Regulatory Specialist		
Approved by (Signature) 	Name (Printed/Typed) J. Kencel	Date 5-15-2008
Title Assistant Field Manager Lands & Mineral Resources		
Office VERNAL FIELD OFFICE		

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

CONDITIONS OF APPROVAL ATTACHED

NOTICE OF APPROVAL

RECEIVED

MAY 19 2008

DIV. OF OIL, GAS & MINING

NOS 2.19.08  
08PP0447A



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

**Company:** Newfield Production Company  
**Well No:** Humpback Federal T-23-8-17  
**API No:** 43-047-39970

**Location:** SESE Sec 23, T8S, R17E  
**Lease No:** UTU-45431  
**Agreement:** Humpback Unit

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
NRS/Enviro Scientist:		(435) 781-4475	(435) 828-4029
NRS/Enviro Scientist:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:		(435) 781-4476	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7482
NRS/Enviro Scientist:		(435) 781-3400	(435) 828-3544
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545

**Fax: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify NRS/Enviro Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify NRS/Enviro Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings
BOP & Related Equipment Tests (Notify Supervisory Petroleum Technician)	-	Twenty-Four (24) hours prior to initiating pressure tests
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days



**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**General Surface COAs**

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**Specific Surface COAs**

STIPULATIONS: NONE

Lease Notices from RMP:

- The lessee/operator is given notice the area has been identified as containing Ferruginous hawk habitat. Modifications may be required in the Surface Use Plan to protect the Ferruginous hawk and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.
- The lessee/operator is given notice the area has been identified as containing Golden eagle habitat. Modifications may be required in the Surface Use Plan to protect the Golden eagle and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

Comments: NONE

Follow-up Actions and/or Recommendations:

**Please be aware that this Special Status Species wildlife clearance is effective for 1 year from the date of the onsite date. Any proposals submitted after the date of this report (onsite) should require additional surveys and clearances.**

**CONDITIONS OF APPROVAL:**

- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- All pipelines (surface and buried) will be laid within one 50' wide construction ROW, on one side of the road, and will reduce down to a 30' wide permanent ROW on lease.
- A temporary road ROW will not be granted. The road ROW will be 30 foot for construction and will reduce to an 18 foot running surface.
- The access road will be crowned and ditched. Flat-bladed roads are not allowed. All roads will have an 18', crowned (2 to 3% minimum), running surface. All roads will have drainage ditches along both sides of road.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such

equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- To insure impermeability, the reserve pit will be lined with a 16 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- Any hydrocarbons in the reserve pit will be removed **immediately** upon well completion; in accordance with 43 CFR 3162.7-1. Pits must be free of oil and other liquid and solid wastes prior to filling.
- Monument Butte SOP, Section 9.2 - Pit Fencing Minimum Standards - will be strictly adhered to. To include 9.2.2.3 - Corner posts will be cemented and/or braced in such a manner as to keep fence tight at all times.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- **Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), on Sundry Notice Form 3160-5, an Interim Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. This will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.**

#### **Interim Reclamation:**

- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be **seeded using a rangeland drill**. Seeding depth as per AO, or seed distributor. If portions of the site are too steep (>40%), or rocky, that portion may be broadcast seeded. If broadcasting seed, the seed shall be walked into the soil with a dozer immediately after the seeding is completed, or covered by soil using a drag chain. Seeding shall occur in the late summer to fall (September 1<sup>st</sup> until snow or ground is frozen) with the following seed mix:

Common name	Latin name	lbs/acre	Recommended seed planting depth
Squirreltail grass	<i>Elymus elymoides</i>	3.0	¼ - ½"
Siberian wheatgrass	<i>Agropyron fragile</i>	1.0	½"
Shadscale saltbush	<i>Atriplex confertifolia</i>	0.50	½"
Four-wing saltbush	<i>Atriplex canescens</i>	0.50	½"
Gardner's saltbush	<i>Atriplex gardneri</i>	0.50	½"
Scarlet globemallow	<i>Sphaeralcea coccinea</i>	0.10	⅛ - ¼"
Forage Kochia	<i>Kochia prostratus</i>	0.10	⅛ - ¼"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
- Rates are set for drill seeding; double rate if broadcasting.
- Reseeding may be required if initial seeding is not successful.

### Final reclamation:

Once the location is plugged and abandoned, the well location, access, and any disturbed areas shall be recontoured to natural topography, topsoil shall be respread, and the entire location shall be seeded following guidelines in the seed mix bullet statement above. Final seed mix: same as interim.

- Noxious and/or invasive weeds will be controlled along access roads, pipelines, well sites, and all other applicable facilities. Any noxious and/or invasive weeds outbreak, directly attributed to the activities of the Operator, will be the responsibility of the Operator to control. On BLM administered land, a Pesticide Use Proposal (PUP) must be submitted and approved prior to the application of herbicides, pesticides, or other possibly hazardous chemicals.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be recontoured and the topsoil respread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be recontoured to natural topology, topsoil shall be respread, and the entire location shall be seeded with a seed mix recommended by the AO (see above). Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

## **DOWNHOLE CONDITIONS OF APPROVAL**

### **SITE SPECIFIC DOWNHOLE CONDITIONS OF APPROVAL**

- Logging: Run Gamma Ray from TD to surface

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

### **DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) shall the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Wellogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Shall the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (1/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

## DIVISION OF OIL, GAS AND MINING

### ***SPUDDING INFORMATION***

Name of Company: Newfield Production Company

Well Name: Humpback Fed T 23-8-17

API No: 43-047-39970 Lease Type: Federal

Section 23 Township 08S Range 17E County Uintah

Drilling Contractor \_\_\_\_\_ Rig # \_\_\_\_\_

### **SPUDDED:**

Date 7-02-08

Time 12:00 PM

How Dry

***Drilling will Commence:*** \_\_\_\_\_

Reported by Justin Crum

Telephone # 435-823-6732

Date 7-03-08 Signed RM



STATE OF UTAH  
DIVISION OF OIL, GAS AND MINING  
ENTITY ACTION FORM - FORM 8

OPERATOR: NEWFIELD PRODUCTION COMPANY  
ADDRESS: RT. 3 BOX 3630  
MYTON, UT 84062

OPERATOR ACCT. NO. N2695

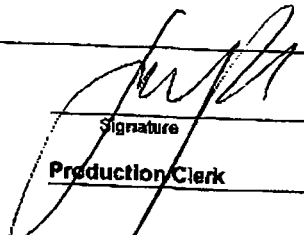
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	99999	16965	4304739421	FEDERAL 14-19-9-18	SESW	19	9S	18E	UINTAH	6/30/2008	7/15/08
WELL 1 COMMENTS: GRRV											
B	99999	12418	4301333927	WEST POINT FED S-7-9-16	SESE	7	9S	16E	DUCHESNE	7/7/2008	7/15/08
GRRV BHL = NWSE											
B	99999	12053	4304739970	HUMPBAC FED T-23-8-17	SESE	23	8S	17E	UINTAH	7/2/2008	7/15/08
GRRV BHL = NESE											
B	99999	14844	4304736404	FEDERAL 2-13-9-17	NWNE	13	9S	17E	UINTAH	7/7/2008	7/15/08
GRRV											
A	99999	16966	4301333889	UTE TRIBAL 15-22-4-2	SWSE	22	4S	2W	DUCHESNE	7/7/2008	7/15/08
WELL 5 COMMENTS: GRRV											
B	99999	12053	4304739971	HUMPBAC FED I-25-8-17	NWNE	25	8S	17E	UINTAH	7/8/2008	7/15/08
WELL 5 COMMENTS: GRRV BHL = SWNE											

ACTION CODES (See instructions on back of form)

- A - New entity for new well (single well only)
- B - Well to existing entity (group or unit well)
- C - From one existing entity to another existing entity
- D - Well from one existing entity to a new entity
- E - Other (explain in comments section)

NOTE: Use COMMENT section to explain why each Action Code was selected.

RECEIVED  
JUL 10 2008  
DIV. OF OIL, GAS & MINING

Signature:   
Jenri Park  
Production Clerk  
Date: 07/10/08

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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JUL 14 2008

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to reopen GAS & MINING  
abandoned well. Use Form 3160-3 (APD) for such proposals.FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

## 1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

## 2. Name of Operator

NEWFIELD PRODUCTION COMPANY

## 3a. Address Route 3 Box 3630

Myton, UT 84052

## 3b. Phone (include area code)

435 646 3721

## 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

800 FLS 660 FEL

SESE Section 23 T8S R17E

## 5. Lease Serial No.

USA UTU-45431

## 6. If Indian, Allottee or Tribe Name.

## 7. If Unit or CA/Agreement, Name and/or

HUMPBAC UNIT

## 8. Well Name and No.

HUMPBAC FEDERAL T-23-8-17

## 9. API Well No.

4304739970

## 10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

## 11. County or Parish, State

UINTAH, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Spud Notice
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 7/2/08 MIRU Ross # 21. Spud well @ 12:30 PM. Drill 325' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 332KB. On 7/4/08 cement with 160 sks of class "G" w/ 3% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 2 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Justin Crum

Title

Drilling Foreman

Signature

Date

07/08/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

8 5/8 CASING SET AT 332.85

LAST CASING 8 5/8" set @ 329.4  
 DATUM 12' KB  
 DATUM TO CUT OFF CASING \_\_\_\_\_  
 DATUM TO BRADENHEAD FLANGE \_\_\_\_\_  
 TD DRILLER 325' LOGGER \_\_\_\_\_  
 HOLE SIZE 12 1/4

OPERATOR Newfield Production Company  
 WELL Canvasback Federal T-23-8-17  
 FIELD/PROSPECT Monument Butte  
 CONTRACTOR & RIG # Ross 21

LOG OF CASING STRING:							
PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH
		Shoe Joint 44.35'					
		WHI - 92 csg head			8rd	A	0.95
7	8 5/8"	Maverick ST&C csg	24#	J-55	8rd	A	321.95
		<b>GUIDE</b> shoe			8rd	A	0.9
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING			322.85
TOTAL LENGTH OF STRING		322.85		LESS CUT OFF PIECE			2
LESS NON CSG. ITEMS		1.85		PLUS DATUM TO T/CUT OFF CSG			12
PLUS FULL JTS. LEFT OUT		0		CASING SET DEPTH			<b>332.85</b>
TOTAL		321	7	} COMPARE			
TOTAL CSG. DEL. (W/O THRDS)		321	7				
TIMING		1ST STAGE					
BEGIN RUN CSG.		Spud	7/2/2008	12:30 PM	GOOD CIRC THRU JOB <u>yes</u>		
CSG. IN HOLE			7/3/2008		Bbls CMT CIRC TO SURFACE <u>2</u>		
BEGIN CIRC			7/4/2008		RECIPROCATED PIPE FOR <u>N/A</u>		
BEGIN PUMP CMT			7/4/2008				
BEGIN DSPL. CMT			7/4/2008		BUMPED PLUG TO <u>134</u> PSI		
PLUG DOWN			7/4/2008				
CEMENT USED		CEMENT COMPANY- <b>B. J.</b>					
STAGE	# SX	CEMENT TYPE & ADDITIVES					
1	160	Class "G" w/ 2% CaCL2 + 1/4#/sk Cello-Flake mixed @ 15.8 ppg 1.17 cf/sk yield					
CENTRALIZER & SCRATCHER PLACEMENT		SHOW MAKE & SPACING					
Centralizers - Middle first, top second & third for 3							

COMPANY REPRESENTATIVE Justin Crum DATE 7/7/2008

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SUNDRY NOTICES AND REPORTS ON WELLS**  
Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUBMIT IN TRIPLICATE - Other Instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

NEWFIELD PRODUCTION COMPANY

3a. Address

Route 3 Box 3630  
Myton, UT 84052

3b. Phone (include area code)

435.646.3721

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

800 FLS 660 FEL

SESE Section 23 T8S R17E

5. Lease Serial No.

USA UTU-45431

6. If Indian, Allottee or Tribe Name.

7. If Unit or CA/Agreement, Name and/or

HUMPBAC UNIT

8. Well Name and No.

HUMPBAC FEDERAL T-23-8-17

9. API Well No.

4304739970

10. Field and Pool, or Exploratory Area

MONUMENT BUTTE

11. County or Parish, State

UINTAH, UT

**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug & Abandon	<input type="checkbox"/> Temporarily Abandon	Weekly Status Report _____
	<input type="checkbox"/> Convert to Injector	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 7/6/08 MIRU NDSI Rig # 1. Set all equipment. Pressure test Kelly, TIW, Choke manifold, & Bop's to 2,000 psi. Test 8.625 csgn to 1,500 psi. Vernal BLM field, & Roosevelt DOGM office was notified of test. PU BHA and tag cement @ 290'. Drill out cement & shoe. Drill a 7.875 hole with fresh water to a depth of 6689'. Lay down drill string & BHA. Open hole log w/ Dig/SP/GR log's TD to surface. PU & TIH with Guide shoe, shoe jt, float collar, 158 jt's of 5.5 J-55, 15.5# csgn. Set @ 6659' / KB. Cement with 325 sks cement mixed @ 11.0 ppg & 3.43 yld. Then 450 sks cement mixed @ 14.4 ppg & 1.24 yld. Returned 45 of 50 bbls of dyed water to reserve pit. Nipple down Bop's. Drop slips @ 101,000 #'s tension. Release rig @ 9:00 PM on 7/13/08.

RECEIVED

JUL 30 2008

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)

Justin Crum

Signature

Title

Drilling Foreman

Date

07/28/2008

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title

Date

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

# NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT

LAST CASING <u>8 5/8"</u> SET # <u>329.85</u> DATUM <u>12' KB</u> DATUM TO CUT OFF CASING <u>12'</u> DATUM TO BRADENHEAD FLANGE _____ TD DRILLER <u>6635' Loggers</u> HOLE SIZE <u>7 7/8"</u>	CASING SET AT <u>6659.2</u> Flt clr @ <u>6574.75</u> OPERATOR <u>Newfield Production Company</u> WELL <u>HBF T-23-8-17</u> FIELD/PROSPECT <u>Monument Butte</u> CONTRACTOR & RIG # _____ NDSI # <u>1</u> TVD = _____
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## LOG OF CASING STRING:

PIECES	OD	ITEM - MAKE - DESCRIPTION	WT / FT	GRD	THREAD	CONDT	LENGTH	
		Landing Jt					14	
		Short jt 4091' (7.11)						
157	5 1/2"	ETC LT & C casing	15.5#	J-55	8rd	A	6603.45	
		Float collar					0.6	
1	5 1/2"	ETC LT&C csg	15.5#	J-55	8rd	A	42.5	
		GUIDE shoe			8rd	A	0.65	
CASING INVENTORY BAL.		FEET	JTS	TOTAL LENGTH OF STRING				6661.2
TOTAL LENGTH OF STRING		6661.2	158	LESS CUT OFF PIECE				14
LESS NON CSG. ITEMS		15.25		PLUS DATUM TO T/CUT OFF CSG				12
PLUS FULL JTS. LEFT OUT		258.9	6	CASING SET DEPTH				6659.2
TOTAL		6904.85	164	} COMPARE				
TOTAL CSG. DEL. (W/O THRDS)		6904.85	164					
TIMING		1ST STAGE	2nd STAGE	GOOD CIRC THRU JOB Yes Bbls CMT CIRC TO SURFACE 0 RECIPROCATED PIPE FOR THRUSTROKE NA DID BACK PRES. VALVE HOLD ? Yes BUMPED PLUG TO 1860 PSI				
BEGIN RUN CSG.		7/13/2008	2:00 PM					
CSG. IN HOLE		7/13/2008	6:00 PM					
BEGIN CIRC		7/13/2008	6:00 PM					
BEGIN PUMP CMT		7/14/2008	6:44 PM					
BEGIN DSPL. CMT		7/14/2008	7:32 PM					
PLUG DOWN		7/14/2008	8:03 AM					
CEMENT USED		CEMENT COMPANY- B. J.						
STAGE	# SX	CEMENT TYPE & ADDITIVES						
1		Premlite II w/ 10% gel + 3 % KCL, 3#'s /sk CSE + 2# sk/kolseal + 1/2#'s/sk Cello Flake						
		mixed @ 11.0 ppg W / 3.49 cf/sk yield						
2		50/50 poz W/ 2% Gel + 3% KCL, .5%EC1, 1/4# sk C.F. 2% gel. 3% SM mixed @ 14.4 ppg W/ 1.24 YLD						
CENTRALIZER & SCRATCHER PLACEMENT			SHOW MAKE & SPACING					
Centralizers - Middle first, top second & third. Then every third collar for a total of 20.								

COMPANY REPRESENTATIVE Justin Crum DATE 7/14/2008

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-45431
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: HUMPBAC UNIT
3. ADDRESS OF OPERATOR: Route 3 Box 3630	CITY Myton STATE UT ZIP 84052	7. UNIT or CA AGREEMENT NAME: HUMPBAC FEDERAL T-23-8-17
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 800 FLS 660 FEL		8. WELL NAME and NUMBER: HUMPBAC FEDERAL T-23-8-17
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESE, 23, T8S, R17E		9. API NUMBER: 4304739970
		10. FIELD AND POOL, OR WILDCAT: MONUMENT BUTTE
		COUNTY: UINTAH
		STATE: UT

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate)  Approximate date work will _____	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> PLUG BACK <input type="checkbox"/> PRODUCTION (START/STOP) <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLAIR <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> WATER SHUT-OFF <input checked="" type="checkbox"/> OTHER: - Weekly Status Report
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: <u>08/29/2008</u>			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The above subject well was completed on 08-06-08, attached is a daily completion status report.

NAME (PLEASE PRINT) <u>Jentri Park</u>	TITLE <u>Production Clerk</u>
SIGNATURE 	DATE <u>08/29/2008</u>

(This space for State use only)

**RECEIVED**  
**SEP 02 2008**  
DIV. OF OIL, GAS & MINING

**Daily Activity Report**

Format For Sundry

**HUMPBAC T-23-8-17****6/1/2008 To 10/30/2008****7/25/2008 Day: 1****Completion**

Rigless on 7/24/2008 - nstall 5M frac head. NU 6" 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 6554' & cement top @ 440'. Perforate stage #1. BSL CARB @ 6504- 6510', 6474- 6488' w/ 3 1/8" slick guns (19 gram, .49" HE, 120°, 21.92" pen, EXP-3319-331 Titan) w/ 4 spf for total of 80 shots. 157 BWTR. SIFN.

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**7/31/2008 Day: 2****Completion**

Rigless on 7/30/2008 - Stage #1, BSL LS sands. RU BJ Services. 130 psi on well. Frac BSL LS sds w/ 19,340#'s of 20/40 sand in 464 bbls of Lightning 17 fluid. Broke @ 3084 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2862 psi @ ave rate of 22.9 BPM. Pumped 504 gals of 15% HCL in flush for Stage #2. ISIP 2500 psi. Leave pressure on well. 621 BWTR. Stage #2, CP4 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 10' perf gun. Set plug @ 6400'. Perforate CP4 sds @ 6296- 6306' w/ 3-1/8" Slick Guns w/ 4 spf for total of 40 shots. RU BJ Services. 2098 psi on well. Frac CP4 sds w/ 50,238#'s of 20/40 sand in 487 bbls of Lightning 17 fluid. Broke @ 2811 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 1779 psi @ ave rate of 23.1 BPM. Pumped 504 gals of 15% HCL in flush for Stage #3. ISIP 1985 psi. Leave pressure on well. 1108 BWTR. Stage #3, CP3 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 8' perf gun. Set plug @ 6250'. Perforate CP3 sds @ 6216- 24' w/ 3-1/8" Slick Guns w/ 4 spf for total of 32 shots. RU BJ Services. 1650 psi on well. Pressured up to 4200 psi, Would not breakdown RU WL & dump bail acid. RU Bj Services. 1650 psi on well. Frac CP3 sds w/ 25,084#'s of 20/40 sand in 413 bbls of Lightning 17 fluid. Broke @ 3184 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2298 psi @ ave rate of 23.1 BPM. Pumped 504 gals of 15% HCL in flush for Stage #4. ISIP 2271 psi. Leave pressure on well. SIWFN w/ 1595 BWTR.

---

**8/1/2008 Day: 3****Completion**

Rigless on 7/31/2008 - Stage #4, CP.5 & CP1 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug, 10' & 8' perf gun. Set plug @ 6170'. Perforate CP1 sds @ 6118- 28', CP.5 sds @ 6080- 88' w/ 3-1/8" Slick Guns w/ 4 spf for total of 72 shots. RU BJ Services. 1225 psi on well. Frac CP.5 & CP1 sds w/ 59,665#'s of 20/40 sand in 531 bbls of Lightning 17 fluid. Broke @ 4091 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 1794 psi @ ave rate of 23 BPM. Pumped 504 gals of 15% HCL in flush for Stage #5. ISIP 2085 psi. Leave pressure on well. 2051 BWTR. Stage #5, C sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug, 16' & 18' perf gun. Set plug @ 5550'. Perforate C sds @ 5454- 70', 5418- 36' w/ 3-1/8" Slick Guns w/ 4 spf for total of 136 shots (2 runs). RU BJ Services. 1100 psi on well. Frac C sds w/ 195,522#'s of 20/40 sand in 1327 bbls of Lightning 17 fluid. Broke @ 1184 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/

ave pressure of 1431 psi @ ave rate of 23.1 BPM. Pumped 504 gals of 15% HCL in flush for Stage #6. ISIP 1705 psi. Leave pressure on well. 3378 BWTR. Stage #6, PB7 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 8' perf gun. Set plug @ 4940'. Perforate PB7 sds @ 4840- 48' w/ 3-1/8" Slick Guns w/ 4 spf for total of 32 shots. RU BJ Services. 1360 psi on well. Frac PB7 sds w/ 24,798#'s of 20/40 sand in 346 bbls of Lightning 17 fluid. Broke @ 1751 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 2333 psi @ ave rate of 23.1 BPM. Pumped 504 gals of 15% HCL in flush for Stage #7. ISIP 2592 psi. Leave pressure on well. 3724 BWTR. Stage #7, GB4 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 6' perf gun. Set plug @ 4730'. Perforate GB4 sds @ 4650- 56' w/ 3-1/8" Slick Guns w/ 4 spf for total of 24 shots (2 runs due to misfire on plug). RU BJ Services. 1238 psi on well. Frac GB4 sds w/ 35,701 #'s of 20/40 sand in 419 bbls of Lightning 17 fluid. Broke @ 2209 psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 1828 psi @ ave rate of 23.1 BPM. Pumped 504 gals of 15% HCL in flush for Stage #8. ISIP 1957 psi. Leave pressure on well. 4143 BWTR. Stage #8, GB2 sands. RU Lone Wolf WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" 5K composite flow through frac plug & 10' perf gun. Set plug @ 4620'. Perforate GB2 sds @ 4578- 88' w/ 3-1/8" Slick Guns w/ 4 spf for total of 40 shots. RU BJ Services. 1410 psi on well. Frac GB2 sds w/ 48,769#'s of 20/40 sand in 402 bbls of Lightning 17 fluid. Broke @ psi. Pumped 780 gals of fresh wtr mixed with 30 gals of Techni-Hib 767W. Treated w/ ave pressure of 1990 psi @ ave rate of 23.1 BPM. Screened out 29 bbls short of flush. 40,316#'s in perfs, Left 8453#'s in csg. ISIP 3814 psi. Begin immediate flowback on 20/64 choke @ 3 BPM. Flowed for 7 hrs & died. Rec. 1260 BTF. SIWFN w/ 3285 BWTR.

**8/2/2008 Day: 4**

**Completion**

Western #4 on 8/1/2008 - 550 psi on well. Bleed off pressure. ND Cameron BOP & 5M WH. NU 3M WH & Schaffer BOP. Talley, PU & RIH w/ 4 3/4" chomp bit, Bit sub & 2 7/8" J-55 tbg. Tagged sand @ 4494'. RU Nabors power swivel. C/O to plug @ 4620'. Drilled up in 15 mins. Circulate well clean. SIWFN w/ 3240 BWTR.

**8/5/2008 Day: 5**

**Completion**

Western #4 on 8/4/2008 - 20 psi on tbg, 480 psi on csg. Bleed off pressure. RD rig & do dirt work (Rig was sinking). RU. Continue to PU tbg & drill out plugs as follows: Sand @ 4685', Plug @ 4730' (Drilled out in 15 mins), Sand @ 4816', Plug @ 4940' (Drilled out in 20 mins), No sand, Plug @ 5550' (Drilled out in 20 mins), Sand @ 6138', Plug @ 6170' (Drilled out in 20 mins), No sand, Plug @ 6250' (Drilled out in 20 mins), Sand @ 6335', Plug @ 6400' (Drilled out in 15 mins). Circulate well clean. SIWFN w/ 2810 BWTR.

**8/6/2008 Day: 6**

**Completion**

Western #4 on 8/5/2008 - 510 psi on tbg, 580 psi on csg. Pumped 40 bbls down tbg. TIH w/ tbg. Tagged @ 6530'. C/O to 6596' (Could not get any deeper). LD 2- jts of tbg. EOT @ 6564'. RU swab equipment. IFL @ sfc. Made 2 runs. Well started flowing. Flowed 190 BTF in 4 hrs. Final oil cut 20%. Pumped 30 bbls of 10# brine wtr down to kill well. TIH w/ tbg to 6596' (No new fill). Circulate well w/ 200 bbls of 10# brine wtr. TOH w/ tbg. LD bit & bit sub. TIH w/ production tbg as follows: BP & collar, 4- jts, PBGA, 2 7/8 nipple, 1- jt, SN, 1- jt, TA & 196 jts of 2 7/8" J-55 tbg. ND BOP. Set TA w/ 16,000#'s of tension @ 6149', SN @ 6195', EOT @ 6360'. NU WH. SIWFN w/ 2466 BWTR.



**8/7/2008 Day: 7****Completion**

Western #4 on 8/6/2008 - 50 psi on tbg, 0 psi on csg. Flush tbg w/ 60 bbls of wtr. PU & prime up rod pump. PU & RIH w/ "A" grade rod string as follows: "CDI" 2 1/2" X 1 3/4" X 20' RHAC (184" max stroke length), 4- 1 1/2" wt bar, 243- 7/8 guided rods (8 per), 1- 2', 1-8' X 7/8" pony rods, 1 1/2" X 26' Polish rod. Hang head, Space out rods Pressure test to 800 psi w/ unit. RDMOSU. POP @ 1:00 PM w/ 122" SL @ 5 SPM. FINAL REPORT!!!!

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**Pertinent Files: Go to File List**

(See other instructions on reverse side)

OMB NO. 1004-0137  
Expires: February 28, 1995

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG\***

<b>1a. TYPE OF WORK</b> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____ <b>1b. TYPE OF WELL</b> NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR. <input type="checkbox"/> Other _____						<b>5. LEASE DESIGNATION AND SERIAL NO.</b> UTU-45431 <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME</b> NA <b>7. UNIT AGREEMENT NAME</b> Federal <b>8. FARM OR LEASE NAME, WELL NO.</b> Humphreys Federal T-23-8-17 <b>9. WELL NO.</b> 43-047-39970 <b>10. FIELD AND POOL OR WILDCAT</b> Monument Butte <b>11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA</b> Sec. 23, T8S, R17E <b>12. COUNTY OR PARISH</b> Uintah <b>13. STATE</b> UT	
<b>2. NAME OF OPERATOR</b> Newfield Exploration Company <b>3. ADDRESS AND TELEPHONE NO.</b> 1401 17th St. Suite 1000 Denver, CO 80202 <b>4. LOCATION OF WELL (Report locations clearly and in accordance with any State requirements.)*</b> At Surface 800' FSL & 660' FEL (SE/SE) Sec. 23, T8S, R17E At total depth 1435' FSL & 55' FEL (NE/SE) Sec 23, T8S, R17E At total depth <i>S-23 T08S R17E NESE</i> <i>1444 FSL 0048 FEL</i>						<b>14. API NO.</b> 43-047-39970 <b>DATE ISSUED</b> 03/31/08 <b>15. DATE SPUNDED</b> 07-02-08 <b>16. DATE T.D. REACHED</b> 07-12-08 <b>17. DATE COMPL. (Ready to prod.)</b> 08-06-08 <b>18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*</b> 5067' GL <b>19. ELEV. CASINGHEAD</b> 5079' KB	
<b>20. TOTAL DEPTH, MD &amp; TVD</b> 6610'-TVD 6689'-MD <b>21. PLUG BACK T.D., MD &amp; TVD</b> 6517'-TVD 6596'-MD <b>22. IF MULTIPLE COMPL., HOW MANY*</b>  <b>23. INTERVALS DRILLED BY</b> -----> <b>ROTARY TOOLS</b> X <b>CABLE TOOLS</b>  <b>24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)*</b> Green River 4578'-6510' <b>25. WAS DIRECTIONAL SURVEY MADE</b> Yes <b>26. TYPE ELECTRIC AND OTHER LOGS RUN</b> Dual Induction Guard, SP, Compensated Density, Compensated Neutron, GR, Caliper, Cement Bond Log <b>27. WAS WELL CORED</b> No							

33. CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8" - J-55	24#	333'	12-1/4"	To surface with 160 sx Class "G" cmt	
5-1/2" - J-55	15.5#	6659'	7-7/8"	350 sx Premlite II and 450 sx 50/50 Poz	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	EOT @ 6360'	TA @ 6161'

31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	SPF/NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
(BSL CARB) 6504'-6510', 6474'-6488'	.49"	4/80	6574'-6510'	Frac w/ 19,340# 20/40 sand in 464 bbls fluid
(CP4) 6296'-6306'	.49"	4/40	6296'-6306'	Frac w/ 50,238# 20/40 sand in 487 bbls fluid
(CP3) 6216'-6224'	.49"	4/32	6216'-6224'	Frac w/ 25,084# 20/40 sand in 413 bbls fluid
(CP1 & 5) 6118'-28', 6080'-88"	.49"	4/72	6080'-6128'	Frac w/ 59,665# 20/40 sand in 531 bbls fluid
(C) 5454'-70', 5418'-36'	.49"	4/136	5418'-5470'	Frac w/ 195,522# 20/40 sand in 1327 bbls fluid
(PB7) 4840'-4848'	.49"	4/32	4840'-4848'	Frac w/ 24,798# 20/40 sand in 346 bbls fluid
(GB4) 4650'-4656'	.49"	4/24	4650'-4656'	Frac w/ 35,701# 20/40 sand in 419 bbls fluid
(GB2) 4578'-4588'	.49"	4/40	4578'-4588'	Frac w/ 48,769# 20/40 sand in 402 bbls fluid

33.* PRODUCTION							
<b>DATE FIRST PRODUCTION</b> 08-06-08		<b>PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)</b> 2-1/2" x 1-3/4" x 20' RHAC SM Plunger Pump				<b>WELL STATUS (Producing or shut-in)</b> PRODUCING	
<b>DATE OF TEST</b> 30 day ave	<b>HOURS TESTED</b>	<b>CHOKE SIZE</b>	<b>PROD'N. FOR TEST PERIOD</b> ----->	<b>OIL--BBL.</b> 50	<b>GAS--MCF.</b> 30	<b>WATER--BBL.</b> 100	<b>GAS-OIL RATIO</b> 600
<b>FLOW. TUBING PRESS.</b>	<b>CASING PRESSURE</b>	<b>CALCULATED 24-HOUR RATE</b> ----->	<b>OIL--BBL.</b>	<b>WATER--BBL.</b>	<b>OIL GRAVITY-API (CORR.)</b>		

<b>34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)</b> Used for Fuel	<b>TEST WITNESSED BY</b>
------------------------------------------------------------------------------------	--------------------------

<b>35. LIST OF ATTACHMENTS</b>		<b>RECEIVED</b> <b>SEP 23 2008</b> <b>DIV. OF OIL, GAS &amp; MINING</b> DATE 9/16/2008
<b>36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records</b> SIGNED <u>Jentri Park</u> TITLE <u>Production Tech</u>		

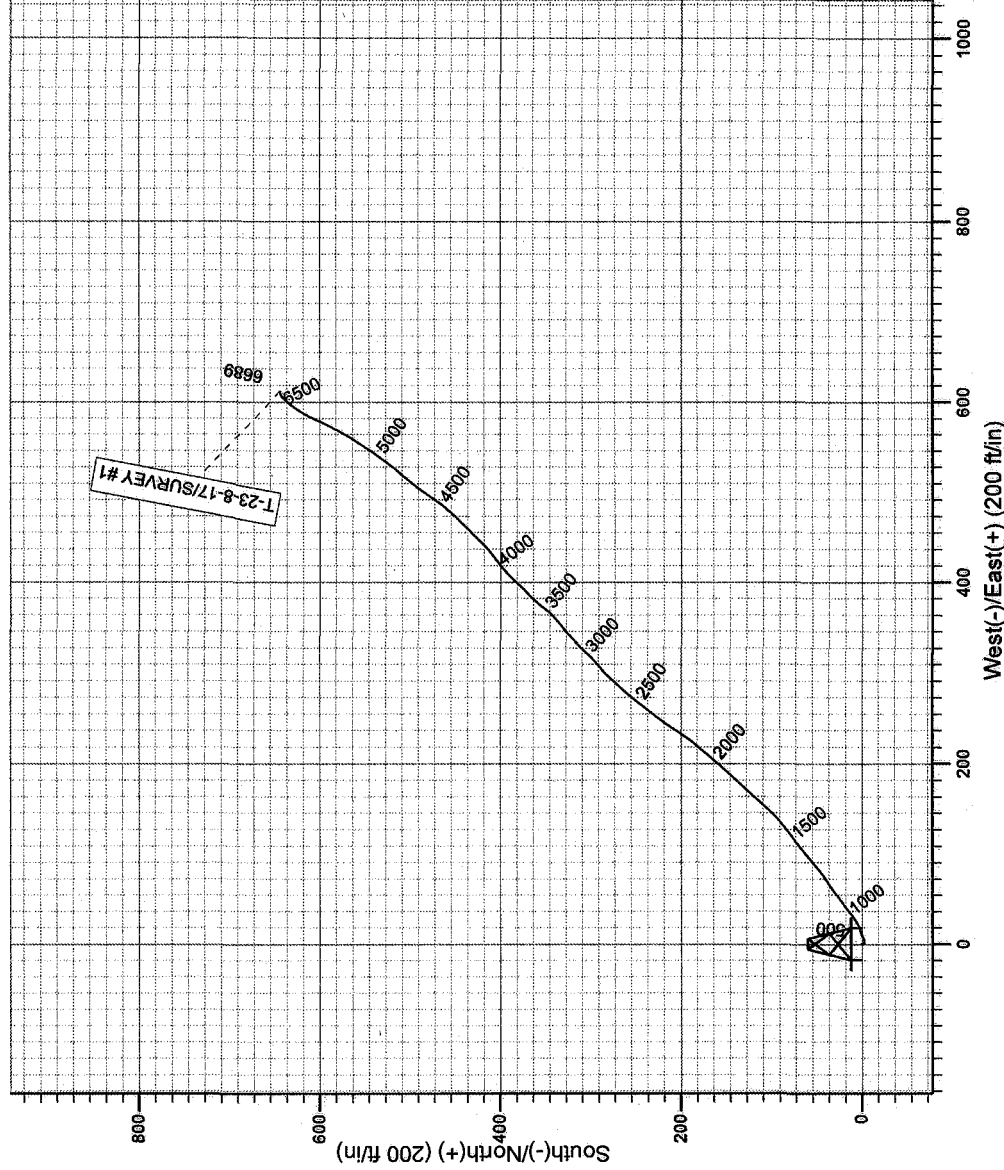
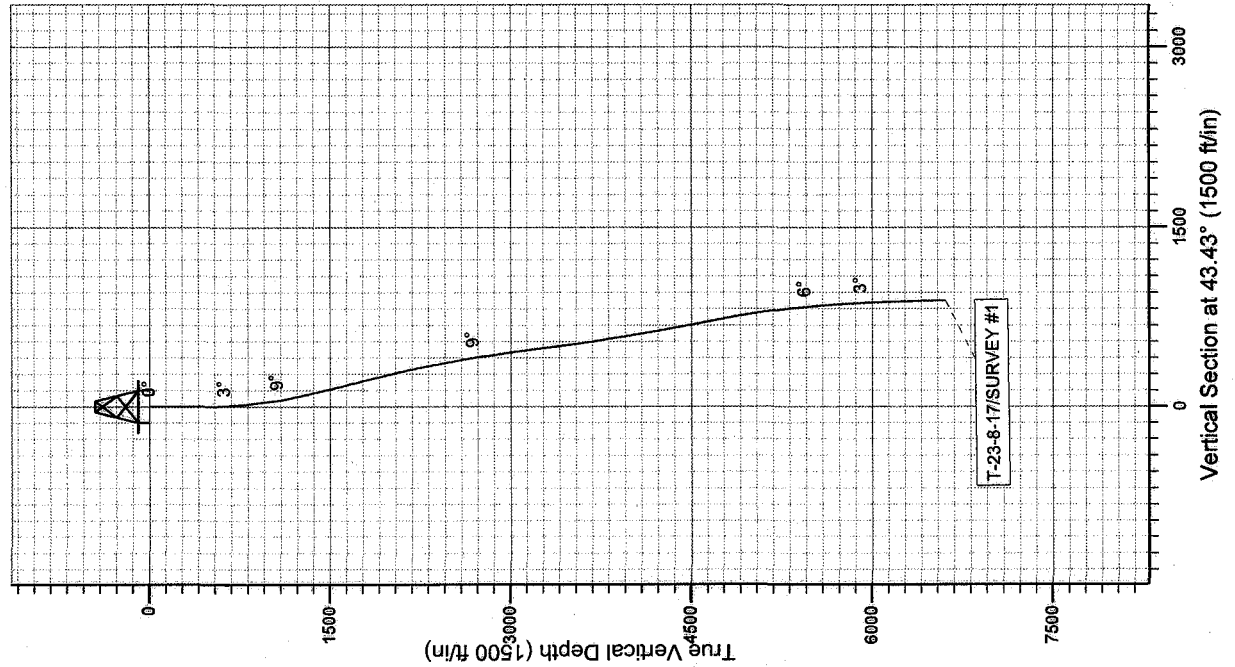
37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);	38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	<div>NAME</div> <div>MEAS. DEPTH</div> <div>TOP</div> <div>TRUE VERT. DEPTH</div>
			Well Name Federal T-23-8-17	Garden Gulch Mkr 4225' Garden Gulch 1 4414' Garden Gulch 2 4530' Point 3 Mkr 4809' X Mkr 5037' Y-Mkr 5072' Douglas Creek Mkr 5206' BiCarbonate Mkr 5487' B Limestone Mkr 5642' Castle Peak 6062' Basal Carbonate 6472' Total Depth (LOGGERS) 6685'



Project: USGS Myton SW (UT)  
Site: SECTION 23  
Well: T-23-8-17  
Wellbore: Wellbore #1  
Design: SURVEY #1

FINAL SURVEY REPORT

Azimuths to True North  
Magnetic North: 11.64°  
Magnetic Field  
Strength: 52628.0snT  
Dip Angle: 65.94°  
Date: 7/25/2008  
Model: IGRF200510



**HATHAWAY** **BURNHAM**  
DIRECTIONAL & MWD SERVICES

Design: SURVEY #1 (T-23-8-17/Wellbore #1)

Created By: *Tom Hudson* Date: 14:03, July 25 2008

THIS SURVEY IS CORRECT TO THE BEST OF MY  
KNOWLEDGE AND IS SUPPORTED BY ACTUALFIELD DATA.

**NEWFIELD**



## **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)**

**SECTION 23**

**T-23-8-17**

**Wellbore #1**

**Design: SURVEY #1**

## **Standard Survey Report**

**25 July, 2008**

**HATHAWAY HB BURNHAM**  
DIRECTIONAL & MWD SERVICES



## Hathaway Burnham

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 23  
**Well:** T-23-8-17  
**Wellbore:** Wellbore #1  
**Design:** SURVEY #1

**Local Co-ordinate Reference:** Well T-23-8-17  
**TVD Reference:** T-23-8-17 @ 5079.0ft (KB)  
**MD Reference:** T-23-8-17 @ 5079.0ft (KB)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

<b>Project</b>	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Central Zone	Using geodetic scale factor	

Site		SECTION 23, SEC 23 T8S, R17E			
Site Position:		Northing:	7,210,510.62ft	Latitude:	40° 6' 17.100 N
From:	Lat/Long	Easting:	2,066,656.60ft	Longitude:	109° 58' 33.810 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.98 °

Well	T-23-8-17, SHL LAT: 40 05' 54.50" LONG: 109 58' 00.09"					
Well Position	+N/-S	0.0 ft	Northing:	7,208,268.97 ft	Latitude:	40° 5' 54.500 N
	+E/-W	0.0 ft	Easting:	2,069,315.36 ft	Longitude:	109° 58' 0.090 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	0.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF200510	7/25/2008	11.64	65.94	52,628

<b>Design</b>	SURVEY #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	5,400.0	0.0	0.0	43.43	

<b>Survey Program</b>	<b>Date</b> 7/25/2008				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
446.0	6,689.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
446.0	0.60	160.80	446.0	-2.2	0.8	-1.1	0.13	0.13	0.00
537.0	2.00	81.80	537.0	-2.4	2.5	0.0	2.17	1.54	-86.81
630.0	3.60	65.80	629.9	-1.0	6.8	3.9	1.90	1.72	-17.20
722.0	4.90	72.80	721.6	1.3	13.2	10.0	1.52	1.41	7.61
814.0	6.10	63.90	813.2	4.7	21.3	18.0	1.60	1.30	-9.67
908.0	7.30	53.00	906.5	10.4	30.6	28.6	1.85	1.28	-11.60
1,002.0	8.00	53.40	999.7	17.9	40.6	40.9	0.75	0.74	0.43
1,095.0	9.90	54.10	1,091.6	26.5	52.2	55.2	2.05	2.04	0.75
1,188.0	11.90	57.60	1,182.9	36.3	66.8	72.3	2.26	2.15	3.76
1,282.0	13.70	51.00	1,274.6	48.5	83.7	92.7	2.46	1.91	-7.02
1,376.0	13.80	50.90	1,365.9	62.6	101.0	114.9	0.11	0.11	-0.11
1,470.0	13.50	51.20	1,457.2	76.5	118.3	136.9	0.33	-0.32	0.32



## Hathaway Burnham

## Survey Report



Company: NEWFIELD EXPLORATION  
 Project: USGS Myton SW (UT)  
 Site: SECTION 23  
 Well: T-23-8-17  
 Wellbore: Wellbore #1  
 Design: SURVEY #1

Local Co-ordinate Reference: Well T-23-8-17  
 TVD Reference: T-23-8-17 @ 5079.0ft (KB)  
 MD Reference: T-23-8-17 @ 5079.0ft (KB)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 2003.21 Single User Db

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,563.0	13.50	50.70	1,547.6	90.2	135.1	158.4	0.13	0.00	-0.54
1,657.0	14.50	42.10	1,638.8	105.9	151.5	181.1	2.45	1.06	-9.15
1,750.0	13.90	42.90	1,729.0	122.7	166.9	203.9	0.68	-0.65	0.86
1,843.0	13.90	41.90	1,819.3	139.2	182.0	226.2	0.26	0.00	-1.08
1,937.0	14.00	42.30	1,910.5	156.0	197.2	248.9	0.15	0.11	0.43
2,031.0	13.30	40.30	2,001.9	172.7	211.8	271.0	0.90	-0.74	-2.13
2,125.0	12.70	37.80	2,093.4	189.1	225.1	292.1	0.87	-0.64	-2.66
2,217.0	13.20	32.00	2,183.1	206.0	236.9	312.5	1.51	0.54	-6.30
2,311.0	12.00	38.00	2,274.8	222.8	248.6	332.7	1.89	-1.28	6.38
2,404.0	11.30	37.80	2,365.9	237.6	260.1	351.4	0.75	-0.75	-0.22
2,497.0	10.40	35.30	2,457.3	251.7	270.6	368.8	1.09	-0.97	-2.69
2,591.0	10.20	44.50	2,549.8	264.5	281.3	385.5	1.76	-0.21	9.79
2,685.0	9.30	41.00	2,642.4	276.2	292.1	401.4	1.15	-0.96	-3.72
2,779.0	8.50	48.20	2,735.3	286.6	302.3	415.9	1.46	-0.85	7.66
2,873.0	7.80	50.40	2,828.3	295.3	312.4	429.2	0.82	-0.74	2.34
2,967.0	8.70	41.50	2,921.4	304.7	322.0	442.6	1.66	0.96	-9.47
3,061.0	8.70	45.70	3,014.3	314.9	331.8	456.8	0.68	0.00	4.47
3,154.0	8.00	46.60	3,106.3	324.3	341.6	470.3	0.77	-0.75	0.97
3,248.0	7.20	51.70	3,199.5	332.4	350.9	482.7	1.11	-0.85	5.43
3,342.0	7.10	50.70	3,292.7	339.8	360.0	494.3	0.17	-0.11	-1.06
3,436.0	6.10	37.10	3,386.1	347.4	367.6	505.0	1.97	-1.06	-14.47
3,529.0	8.00	39.20	3,478.4	356.4	374.6	516.4	2.06	2.04	2.26
3,623.0	7.60	45.60	3,571.5	365.8	383.2	529.1	1.02	-0.43	6.81
3,717.0	8.80	45.10	3,664.6	375.2	392.7	542.5	1.28	1.28	-0.53
3,779.0	9.70	43.80	3,725.8	382.4	399.7	552.5	1.49	1.45	-2.10
3,810.0	9.90	44.00	3,756.3	386.2	403.4	557.7	0.65	0.65	0.65
3,841.0	10.30	45.50	3,786.8	390.0	407.2	563.2	1.54	1.29	4.84
3,873.0	9.50	45.40	3,818.4	393.9	411.1	568.7	2.50	-2.50	-0.31
3,904.0	8.90	49.40	3,849.0	397.2	414.8	573.6	2.83	-1.94	12.90
3,935.0	8.10	51.30	3,879.6	400.2	418.3	578.2	2.73	-2.58	6.13
3,966.0	8.70	53.80	3,910.3	402.9	421.9	582.6	2.27	1.94	8.06
3,997.0	8.70	53.80	3,940.9	405.7	425.7	587.2	0.00	0.00	0.00
4,029.0	9.10	52.40	3,972.5	408.7	429.6	592.1	1.42	1.25	-4.38
4,060.0	9.60	50.40	4,003.1	411.8	433.6	597.1	1.92	1.61	-6.45
4,091.0	10.10	48.20	4,033.7	415.3	437.6	602.4	2.02	1.61	-7.10
4,122.0	10.00	45.60	4,064.2	419.0	441.5	607.8	1.50	-0.32	-8.39
4,154.0	10.00	43.80	4,095.7	422.9	445.4	613.3	0.98	0.00	-5.63
4,185.0	10.10	43.70	4,126.2	426.8	449.2	618.8	0.33	0.32	-0.32
4,216.0	9.80	45.20	4,156.8	430.6	452.9	624.1	1.28	-0.97	4.84
4,247.0	10.10	44.50	4,187.3	434.4	456.7	629.5	1.04	0.97	-2.26
4,279.0	10.60	45.00	4,218.8	438.5	460.8	635.2	1.59	1.56	1.56
4,310.0	11.30	44.50	4,249.2	442.7	464.9	641.1	2.28	2.26	-1.61
4,341.0	11.20	44.40	4,279.6	447.0	469.1	647.1	0.33	-0.32	-0.32
4,372.0	10.60	46.90	4,310.1	451.1	473.3	653.0	2.46	-1.94	8.06
4,466.0	11.00	36.20	4,402.4	464.3	484.9	670.5	2.17	0.43	-11.38
4,559.0	9.80	34.30	4,493.9	478.0	494.6	687.1	1.34	-1.29	-2.04
4,653.0	9.70	36.70	4,586.5	490.9	503.9	702.9	0.45	-0.11	2.55
4,747.0	10.90	41.50	4,679.0	503.9	514.5	719.7	1.57	1.28	5.11
4,840.0	10.30	38.10	4,770.4	517.1	525.5	736.7	0.93	-0.65	-3.66
4,934.0	10.50	36.50	4,862.9	530.6	535.7	753.6	0.37	0.21	-1.70
5,028.0	9.90	34.90	4,955.4	544.1	545.4	770.1	0.71	-0.64	-1.70
5,122.0	8.70	33.60	5,048.2	556.6	554.0	785.1	1.30	-1.28	-1.38
5,247.0	8.00	29.80	5,171.8	572.0	563.6	802.9	0.71	-0.56	-3.04
5,278.0	7.60	28.70	5,202.5	575.7	565.6	806.9	1.38	-1.29	-3.55



## Hathaway Burnham

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 23  
**Well:** T-23-8-17  
**Wellbore:** Wellbore #1  
**Design:** SURVEY #1

**Local Co-ordinate Reference:** Well T-23-8-17  
**TVD Reference:** T-23-8-17 @ 5079.0ft (KB)  
**MD Reference:** T-23-8-17 @ 5079.0ft (KB)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,309.0	7.30	28.20	5,233.3	579.2	567.5	810.8	0.99	-0.97	-1.61
5,403.0	6.90	28.10	5,326.6	589.5	573.0	822.0	0.43	-0.43	-0.11
5,482.3	6.14	26.37	5,405.3	597.5	577.1	830.7	0.99	-0.96	-2.18
<b>T-23-8-17 TGT</b>									
5,497.0	6.00	26.00	5,420.0	598.9	577.8	832.2	0.99	-0.95	-2.51
5,591.0	5.00	24.40	5,513.5	607.0	581.7	840.7	1.08	-1.06	-1.70
5,684.0	4.50	28.70	5,606.2	613.9	585.1	848.1	0.66	-0.54	4.62
5,778.0	4.20	31.30	5,699.9	620.1	588.7	855.0	0.38	-0.32	2.77
5,872.0	4.00	33.50	5,793.7	625.8	592.3	861.6	0.27	-0.21	2.34
5,965.0	2.90	34.80	5,886.5	630.4	595.4	867.1	1.19	-1.18	1.40
6,059.0	2.40	40.70	5,980.4	633.8	598.0	871.4	0.61	-0.53	6.28
6,152.0	2.20	39.90	6,073.4	636.7	600.4	875.2	0.22	-0.22	-0.86
6,247.0	1.90	43.90	6,168.3	639.2	602.7	878.6	0.35	-0.32	4.21
6,341.0	1.70	47.70	6,262.2	641.3	604.8	881.5	0.25	-0.21	4.04
6,489.0	1.10	60.40	6,410.2	643.5	607.7	885.1	0.45	-0.41	8.58
6,590.0	1.20	84.30	6,511.2	644.1	609.6	886.8	0.48	0.10	23.66
6,634.0	1.30	100.90	6,555.2	644.0	610.5	887.4	0.85	0.23	37.73
6,689.0	1.30	100.90	6,610.2	643.8	611.7	888.1	0.00	0.00	0.00

## Design Targets

## Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
T-23-8-17 TGT	0.00	0.00	5,400.0	636.9	602.9	7,208,916.08	2,069,907.23	40° 6' 0.794 N	109° 57' 52.331 W
- actual wellpath misses by 47.4ft at 5482.3ft MD (5405.3 TVD, 597.5 N, 577.1 E)									
- Circle (radius 75.0)									

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_